

# FACT SHEET

No. 19

## Timber & Timber Harvesting in West Virginia

Fall 2002

### Helicopter Logging

Some sources say helicopter logging began in Scotland in 1956. It was next used in Canada, then the Pacific Northwest and was first used in the Appalachians in 1998 when Columbia Helicopters of Oregon logged a site for the B. A. Mullican Company in Virginia.

Helicopter logging is not a cure for environmental controversy, but it may be the only way to log in areas where roads are not feasible, where the cost of bridges to cross rivers is prohibitive and in other situations where conventional logging is not practicable or allowed. For example, the U. S. Forest Service sometimes requires that a particular sale be helicopter logged. The problem with helicopter logging is that it is very expensive, usually at least double the conventional cost per thousand board feet. Consequently, low grade timber that ordinarily would and should be removed is left standing or is felled and left on the ground. Helicopter logging is fast and is extremely helpful when a purchaser is approaching a time limit for harvesting. The increased costs for mandated helicopter logging results in reduced stumpage prices for the landowner.

In helicopter logging, the tract is first evaluated for feasibility by an experienced foreman who provides cost estimates. If an agreement is reached, the tract is divided into sections or strips running from the bottom to top of the terrain with plastic flagging. Several loggers or cutters are then brought to the job to fell the trees in the conventional way. These men, carrying their chainsaw, gasoline, food, water and repair parts, walk to their assigned strip where they fell, de-limb and top the trees. Cutters work well in advance of the helicopters, because log removal is so rapid that all of the trees on the average size Appalachian job must be felled in advance.

The average logging helicopter carries about 10,000 pounds or five tons per trip, dependent upon air density. Two two-person crews alternate flying, usually at 4-hour intervals. Refueling is done approximately each ½ hour and comprehensive maintenance checks are usually at no more than 2-hour intervals.

The logs are encircled with cables called chokers by loggers called choker setters or riggers. Hookers attach the chokers to a cable hanging from the helicopter. The logs are lifted and moved to a drop area where the chokers are removed. The logs are then moved by conventional skidders to a landing where they are trimmed and loaded on

trucks for transport to the mill or concentration yard. The helicopter makes a trip or turn, depending on distance, in no more than a minute or two. Consequently, 100,000 board feet or more is moved on a good, weather unimpeded, day. The choker setters estimate the size of pay loads although some operators have on-board scales on the drop line. Quick release hooks are used so a load can be aborted if it is too heavy or if problems develop. Flagmen stop traffic whenever a load has to be flown across a road.

(Prepared by Russ Richardson)

This publication is distributed free by the Timber Committee, West Virginia Forestry Association, P. O. Box 718, Ripley, WV 25271. Please call (304-372-1955) or write for additional copies, topics or for a list of speakers and their availability.