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The following article (*Select Cutting Selects What?*) distinguishes "selection harvesting" as defined by foresters, and "select cutting" which is sometimes used to fool people into thinking they are allowing good forestry practices on their property. Appropriate selection harvesting fills a need in certain kinds of forests, but will damage other kinds of forests.

Select Cutting Selects What?

by Bill Cook

Many forest owners have spoken to me about having their forest "select cut", which immediately raises a red flag. There seems to be a popular perception that partial cutting is the best way to employ a timber harvest. Maybe, and maybe not.

A selection harvest, or uneven-aged management, benefits a forest only when the correct trees are harvested and the system is applied to the appropriate forest type. To foresters, the term "selection harvest" or "selection system" has a specific meaning and application. The popularized term "select cut" sometimes has a much less precise definition and might result in as much damage to a forest than a misplaced clearcut. The terms can be confusing.

When all of the biggest and most valuable trees are "selected", then the better term is "high-grading". High-grading is a long-used harvest practice and is one of the worst possible alternatives for the future forest. Unfortunately, many owners will "select cut" a property just prior to a land sale. It sounds good and is profitable, but high-grading is a deplorable practice that sets back forest development for decades.

A diameter-limit cut is another damaging "select cut" that too often gets used. Harvesting all trees above a specified diameter rarely benefits a forest. Also, landowners might be confused about which diameter is used. Typically, one thinks of the diameter at breast height, or 4.5 feet from the ground. However, some shady buyers will use the stump diameter, which translates into many more trees harvested.

Be wary of timber buyers that pass-off all "select cutting" as good forestry. Caution is warranted. Don't be fooled into believing a partial harvest is always better than a clearcut. If you are interested in selling timber and improving the condition of your forest, hire a professional forester.

What is a proper selection harvest? First, it applies to forest types that have the capability of regenerating under their own shade, such as northern hardwoods (maple-beech-yellow birch-basswood). Second, the stand must have trees of various sizes and ages. Third, the trees selected for harvest leave the residual stand in *better* condition than before the harvest. "Better" has to do with tree health, tree quality, growing space, species mix, stand density, and other factors.

Selection harvesting does not apply to forest types that are typically even-aged such as aspen, paper birch, red pine, jack pine, and most oak types. Selection harvesting in these stands will degrade the woodland. Clearcutting or shelterwood systems are better choices for these forests.

There are different kinds of selection harvesting. Single tree selection creates small cut patches, leaves a more uniform distribution of trees, and favors sugar maple. Group selection leaves larger patches and favors a greater diversity of species that require more light, such as white ash, white pine, and hemlock. Either prescription can be applied when the forest becomes over-crowded.

Selection harvesting is the most complex forest management system in the Lake States. There are many variables and no two stands are the same. Selecting trees to harvest requires knowledge of forest ecology, a

discerning eye, and plenty of experience. Usually, a professional forester will mark trees to be harvested and then offer the volume on bid. Sometimes, a logging contractor with sufficient training can choose the trees to be harvested. This is the most efficient process, but you need to have the right logger.

The selection system is only one way to harvest and manage the diverse forests of the Lake States. Like all forest management systems, using the best techniques involves knowing current forest conditions and working towards a desired future condition. There are many forest types and landowner objectives. There is no such thing as one "best" management system. Nature is more complicated than that.

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A collection of these newspaper articles, back to July 1997, can be viewed on the following website: http://michigansaf.org/ForestInfo/Newspaper/0000-Directory.htm or *under the "Forest Info" button of http://michigansaf.org*. .

Montmorency Conservation District's list of Forest Management Professionals
http://www.montmorencycd.org/resources/Resource%20Specialist%20List09%20(2).pdf

Introduction to Forest Management
http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/Habitat_Mgmt/Forest/Introduction_and_Overview.htm

Timber Harvesting
Includes definitions of *shelterwood* and *seed tree* forms of timber management.
http://www.michigandnr.com/publications/pdfs/huntingwildlifehabitat/Landowners_Guide/Habitat_Mgmt/Forest/Timber_Harvesting.htm

Missouri Department of Conservation
Very good description and illustrations of which trees to select for cutting to improve the timber left standing.
http://mdc4.mdc.mo.gov/Documents/285.pdf