## How to Write the Cutting Prescription

On the Cutting Notice form, there are five Cutting Prescription criteria listed to be discussed:

- 1) Describe the proposed cutting.
- 2) Include the current timber type.
- 3) Include the current silvicultural system (even-aged, uneven-aged, etc.).
- 4) Include the target stand condition and identify any pest concerns.
- 5) Identify marking paint colors used (if applicable) and what they represent.

It's strongly encouraged to attach additional pages if further prescriptive information needs to be included, so a more complete understanding of the proposed harvest can be documented. In addition to the five criteria listed in the Cutting Prescription section, the Cutting Notice form can be found online with written instructions that further define what should be included in a complete cutting prescription:

- 1) Provide a complete and precise description of the applied silviculture.
- 2) Stand number affected
- 3) Acres treated
- 4) General management type (i.e. even-age, uneven-age, conversion, etc.)
- 5) Harvest method (i.e. selection, group selection, thinning, etc.)
- 6) Order of removal used
- 7) Target residual stand condition (i.e. basal area, crown closure, gaps, seed trees per acre, etc.)
- 8) Tree retention measures implemented
- 9) Marking paint colors used and representation of stand condition and forest pest concerns. Be sure to identify marking colors used and what they represent.

Let's examine each criterion as found in the online instructions. Including these pertinent parts of the following criteria will ensure adequate information is provided for evaluation and approval.

Provide a complete and concise description of the applied silviculture. This statement should generally describe the stand condition prior to harvest. In other words, include any contributing stand factors used in determining the prescription, such as:

- 1) The timber covertypes,
- 2) The location of where the harvesting is going to take place,
- 3) The starting basal area of the stand, or of the different species,
- 4) The age of the stand,
- 5) Any disease or insect problems,
- 6) Any damage from fire, storm or flood,
- 7) The general stand density, and
- 8) The stand composition and size structure.

Describe how the harvest area is delineated, i.e. by:

- 1) changes in covertype,
- 2) the boundary is painted,
- 3) the boundary is flagged,
- 4) cut to the marked property line,
- 5) harvest to the public road,
- 6) harvest only specific legal descriptions.

Document the harvesting system planned. Some examples include:

- 1) Handcutting with chainsaws,
- 2) Mechanized cutting, e.g. with a processor, a feller-buncher or hot saw.
- 3) Mechanized skidding, e.g. with a forwarder, a cable-skidder or a grapple skidder.
- 4) On-site whole tree chipper
- 5) Other systems.

Describe the planned timing of the harvest, such as:

- 1) Frozen conditions only,
- 2) Dry ground conditions only,
- 3) Break-up job, and
- 4) Oak wilt restrictions in effect, etc.

The second instructions criterion is the particular stand number affected.

This can be obtained from the landowner's management plan or management schedule if stand numbers have been assigned. This references what specific stands are to be included in the harvest treatment.

If no stand numbers exist, stands to be harvested should be described by the identified forest covertype. For example, northern hardwoods, hemlock/hardwoods, red pine plantation, etc. The third criterion is the number of acres treated. This includes the number of acres of each stand or separate timber type that is included in the proposed harvesting.

In harvests with multiple silvicultural prescriptions, acreage should be specific to each different treatment.

The fourth criterion is the general management type. This should describe the overall silvicultural system being followed, i.e. even-aged, uneven-aged, two-aged, conversion, salvage, etc.

Consult the DNR Silviculture Handbook or the Wisconsin Forest Management Guidelines for additional reference information.

The fifth criterion is the harvest method. This is the specific silvicultural treatment being proposed, and must match the silvicultural system described previously. In other words, the particular harvest treatment must be a technique identified for use within that specific silvicultural system.

Uneven-aged silvicultural treatments include:

- Single-tree selection,
- Group-selection, and
- Reserve tree selection.

Even-aged silvicultural treatments include:

Intermediate treatments such as:

- Crop-tree release,
- Thinnings, including row thinning, thinning from below, free thinning, marked thinning, unmarked thinning, variable density thinning, strip thinning, etc. ,
- Improvement cutting,

- Sanitation cutting, and
- Salvage cutting

Regeneration treatments include:

- coppice,
- coppice with standards,
- seed tree,
- shelterwood,
- overstory removal, and
- clearcut (uniform, patch, strip).

The sixth criterion is the order of removal used. In any selection treatment, or in any thinning treatment, there are guidelines recommended to be followed for choosing which particular trees to be removed.

These guidelines are based on a series of decisions criteria that arrive at a desired stand condition and helps meet the landowner's goals.

If improving the timber quality and growth is the primary goal, the standard recommended order of removal is as follows:

- 1) High risk of mortality or failure (unless retained as a wildlife tree),
- 2) Release of crop trees,
- 3) Low crown vigor,
- 4) Poor stem form and quality,
- 5) Less desirable species,
- 6) Improve spacing.

The order can be adjusted somewhat to achieve different landowner goals, stand management objectives and specific silvicultural treatments. Additional information can be found in the DNR Silviculture Handbook.

The seventh criterion is the target residual stand condition. Any information should be included that defines what the desired stand will look liked following completion of the harvest treatment, such as:

- 1) Residual basal area,
- 2) stocking density,
- 3) size class distribution,
- 4) canopy closure,
- 5) number of gaps per acre,
- 6) number of seed trees per acre,
- 7) removal of certain species from the stand,
- 8) numbers of stems of advanced regeneration remaining,
- 9) amount of residual crown cover remaining,
- 10) treatment of slash, etc.

The eighth criterion is any tree retention measures that are implemented. This should describe any retained trees following harvest, and their specific purpose of retention, such as:

- Specific species or trees retained for wildlife use as mast trees, as snags, as den and cavity trees,
- as green trees to meet certification requirements,
- as seed trees of a certain species for regeneration,
- as reserve or relic trees for old-growth component development.

The ninth and final criterion is marking paint colors used and representation. Describe the specific colors and patterns used for:

- trees to cut,
- trees to retain or reserve (not cut)
- timber sale boundary trees,
- property boundaries,
- RMZ and other BMP delineations, and
- locations of harvest roads.

Describe the painting patterns and identification:

- marked at eye level and at stump,
- marked on one side of tree,
- marked on two sides of tree,
- marked with a ring around entire stem,
- marked as a dot, a slash, a chevron, a vertical line or any other unique symbol,
- marked with a "W" to denote a wildlife tree, or
- marked with a "G" to denote a gap tree.

Let's look at a brief example of a cutting prescription meeting all of the discussed criteria.

Landowner Phyllis Bloom is having a multiple stand timber sale. Consultant Joe Forester is submitting the cutting notice for the landowner, and has attached a map to the cutting notice showing the 3 distinct stands included in the harvest.

Notice that there is a separate description for each stand to be harvested. Each prescription is specific to the pertinent criteria for that unique covertype, providing all the details justifying the silvicultural and harvest decisions, and giving the DNR Forester the needed information to make an informed approval.

In summary:

There are five prescription criteria that you must address: Proposed cutting, current timber type, silvicultural system, target stand condition and paint color markings.

In addition, written instructions for the Cutting Notice prescription section further define what should be included in a complete cutting prescription. Be sure to review and understand those instructions.