



Training notes from the woods & the classroom

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Cutting Heavy Leaners

By Lee Schauman

Cutting a tree that has a significant lean is a more difficult challenge to most of us than one that is relatively straight up and down or slightly leaning. It requires skill, experience, and special tools to do the job right. If you have any questions of whether or not you can deal with the leaning tree, your best decision is to leave it alone, or get help.

To cut a tree that has significant forward lean, (the tree is leaning in the direction you want it to fall), following these steps will help you control it. Using the open face notch –boring technique is the only way to control these types of trees, so we will be explaining the procedure using that technique.

1. First, make the open face notch (70 degrees open or more). The hinge must be at least 80 % of the DBH, or longer.
2. At the same plane as the notch, bore cut the tree. (Always be sure to bore cut from the side away from the lean if the tree has side lean) If the tree is large enough to require boring from both sides, always bore cut from the leaning side first. Always leave enough holding wood to be sure the tree does not prematurely release. The heavier the forward lean the more holding wood is required. This is a critical step, since if you cut too far back, the holding wood fiber could rip, causing unexpected release.
3. The final step is to make the release cut **BELOW** the bore cut. As the cuts bypass one another the tree releases and falls. As a rule of thumb, the heavier the forward lean, the further below the bore cut the release cut is made. With severely forward leaning trees, 12 inches or more of space between the bore cut and the release cut will control the speed with which these trees will release. Remember, it is only necessary to bypass the bore cut with the release cut. Do not continue to cut once that step is completed. The longer you stand by the tree and cut wood that is already severed, the more trouble you can get into.

To fell the tree against its' natural lean, the following steps will help you get the job done.

1. Make an open face notch (70 degrees or more)
2. Bore cut the tree using the previously discussed techniques
3. Leave enough holding wood to stabilize the tree so it doesn't set back on your saw.
4. Remove the saw from the bore cut and place wedge (s) tightly into the bore cut. The more wedges you use, the more leverage you will have. (Obviously, the larger the tree the more wedges you will be able to use.)

5. Cut the holding wood below the bore cut, to assure you will not hit your wedges with the saw.
6. Continue pounding the wedges until the tree falls.
7. Using more than one wedge may be necessary. If this is the case, then continue by placing the second wedge in front of the original wedge. (Place it between the original wedge and the hinge) Stacking wedges is also an option, but is used by extremely experienced sawyers, and will be discussed in a later issue.

Felling against the natural lean is necessary when you are trying to:

1. Prevent the tree from falling into other trees or it may be obvious that the tree will hang up if dropped in the wrong direction
2. Place the tree in a specific opening or location
3. Avoid breakage of the tree or residual tree damage
4. Avoid dropping the tree on fence lines, property lines, sidewalks or roadways, etc.

Remember, felling trees against their natural lean, or severely forward leaning trees requires knowledge of the techniques required, and experience in those techniques. Get training, or get help if you feel uncomfortable performing these tasks. And remember, always be safe by making decisions based on your knowledge, experience level and specialized training. And be safe out there!!!!

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