



Training notes from the woods & the classroom

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Cutting Trees Larger Than Bar Length

By Lee Schauman

As I promised, this month we'll talk about felling trees that are larger than the length of the bar. This is a specialized technique that works very well to stay in control of the larger tree, especially when directional felling is necessary, and of course we know that bore cutting always keeps the sawyer safer as well.

When the trees' diameter is larger than the length of the bar on your saw, then the following technique will allow the use of the bore cut.

1. First make the notch in the normal manner. Be sure the open face (70 degrees or greater opening) is used, and the cuts do not bypass by more than 3/8ths of an inch. Set the hinge length at least 80% of the DBH, and the hinge thickness about 10% of the DBH.
2. Begin the bore cut in the usual manner with the attack corner of the bar on either side of the tree. Be sure the initial bore is parallel with the notch cut, and that the bore cut depth is slightly beyond the halfway point of the trees diameter. To be sure your bore cut is deep enough, it is ok to go about two thirds of the diameter of the tree from either side of the tree.
3. Go to the opposite side of the tree and make the second bore cut, again being sure that the bore cut is parallel with the notch, and the cut is deep enough to bypass the initial bore cut. (To be sure your bore cut is parallel and level with your notch cut, it is critical that when you set the hinge, you position yourself so that you can see the entire length of your notch cut. As you set your hinge thickness, parallel your bar with the notch cut, assuring that the thickness of your hinge will be uniform.)
4. It is not necessary to match the bore cuts from side to side, but rather that they bypass one another inside the tree to be certain all of the fibers are cut. Mismatching the cuts has minimal or no effect on the rest of your project, since vertical fibers separate immediately when the tree moves, and your hinge and holding wood control the felling process.
5. The type of release cut you make will depend on the trees lean. Forward lean will allow you to cut from the inside out, while back lean or heavy forward lean will require releasing the holding wood from the back of the tree.
6. Remember, when using the boring technique, things always go better when the cuts are being made with the saw running at maximum rpms.

When you cut trees that are larger than twice the length of the bar on your saw, then one additional step must be used to be sure that all of the fibers inside the tree are cut.

This step would be used immediately after step one above.

Once the notch cut is made, then bore cut through the center of the notch toward the back of the tree. Then, in a pivoting motion, cut out as much wood as you can. Do not move the saw back and forth across the width of the notch, or you will cut the hinge, jeopardizing its integrity. Rather, once the bore cut is made, pivot the saw so that the end of the bar is cutting in a circular motion, while the bar near the engine isn't cutting anything. That way, the inside of the tree will be cut, but the hinge will only have about a 4 ½ inch void in it where the bore cut was made. (see illustrations below.)

After that process is complete, then continue on, boring first one side of the tree, setting the hinge, etc., and then the other side, following the steps outlined above.

If you follow these techniques when cutting larger diameter trees, your ability to control them, and cut them efficiently and control quality and safety will be greatly increased. Remember, as we discussed last month, cutting the corners of your hinge on valuable log trees will prevent possible side scarring.

Next month, we'll talk about cutting heavy leaners, and how to control them. Work Safe!!!

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