

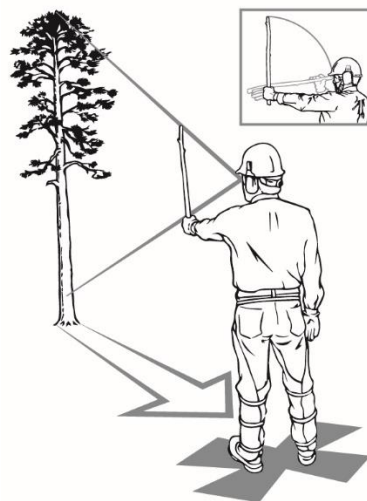
In case you missed it: Summary of key points of Mike Wendt's Tree Felling and Chainsaw Safety Demo from Saturday, March 29 in Hales Corners.

Chainsaws and Safety

- Always wear personal protective equipment (hardhat, hearing and eye protection, and chain-resistant leggings [chaps]) when operating a chainsaw.
- Maintain proper chain tension: The drive links should not completely clear the guide rails on the bar when pulled upward.
- Be aware that the upper quadrant of the tip of the chainsaw bar is the kickback zone, which can cause the saw to violently jump upwards towards the operator.
- When bore-cutting, "attack" the wood with the lower quadrant until the tip is buried. Then the saw bar can be driven straight into the wood.
- Mike prefers to buck up most of the tree with his 200C Stihl chainsaw as it is quiet, powerful, and has a long battery life due to the narrow pitch of the chain. He switches to a gas-powered saw when the wood approaches 12" diameter.

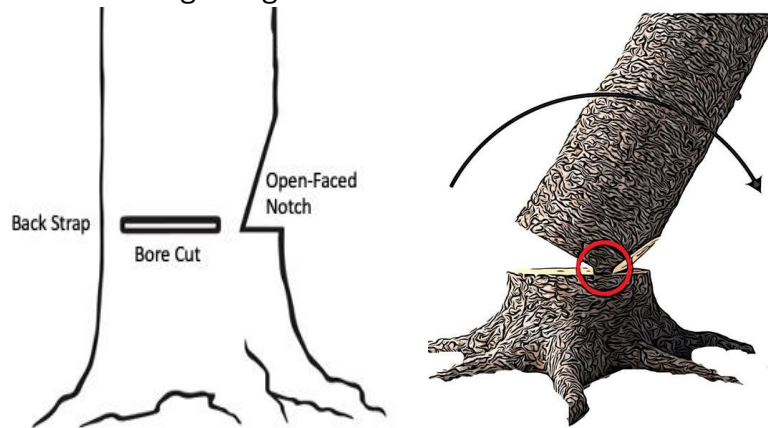
Pre-Felling set-up

- Look for hazards such as powerlines, uneven ground, hangers (suspended tree limbs), wasp nests, etc.
- Look for obstacles such as cars, houses, mailboxes, valuable plants, etc.
- Plan an escape route (45 degrees away from the opposite direction of fall) that is clear of obstacles.
- Formulate a cutting plan, including the direction of the fall, lean, wind, defects on the trunk, etc.
- To compensate for lean, determine the distance of the lean (center of crown from the trunk) and aim the tree the same distance away from the lean (where the tip falls).
- Mike sets a rope (tag line) in trees that he fells as an insurance measure. He throws a lightweight throwline through a high branch union, and uses this to pull a tag line into the tree.
- Keep all people out of the drop zone by a distance of 1.5x the height of the tree.
- The height of the tree can be estimated using 45 degree angles, where the height of the tree equals the distance along the ground. Using a stick or tool handle, form a 90 degree angle where the distance from the stick to your eye is the same as the distance from your hand to the tip. Without moving your head, line up the tip of the stick with the top of the tree, and your hand with the base of the trunk at the notch. The tree's tips will land about at your feet.
For more detail, see the 5 Step Tree Felling Plan in the references.



Felling cuts

- Communicate with the ground crew all phases of the cutting process. Get a response from the ground crew.
- The notch is made in the felling direction (the lay). The notch should be deep enough to be 80% of the diameter of the tree. Mike cuts the top cut first so that he can eye up the bottom cut. Both these cuts must meet at the same line with no over-cutting so that the hinge works properly. Making the notch low on the trunk maximizes the hinge length.



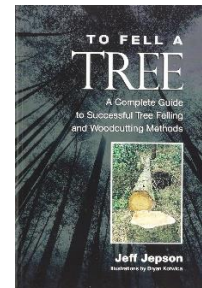
- Mike prefers to bore into the trunk in line with the apex of the notch (the fibers that fold as the tree falls) so that he forms the exact width of the hinge desired without the tree falling prematurely. The hinge width should be 10% of the diameter. The trunk opposite the notch (back strap) is not cut until the hinge is established. Be careful to leave enough back strap as the bark can be deceptively thick.
- When all is clear, (communicate and respond) cut the back strap below the plunge cuts(s). The tree can now fall. LEAVE the area once the tree begins to fall!
- If the tree remains standing, use wedges or a pull line to get it falling.
- When bucking the felled tree, remove elevated limbs early in the process to prevent dangerous rollovers.

References

- Mike recommends the manual To Fell A Tree, by Jeff Jepson.

This inexpensive book is an excellent how-to guide for felling, and was the textbook for my Rigging and Removal class at MATC.

https://www.wesspur.com/to-fell-a-tree-by-jeff-jepson?gad_source=4&gclid=CjwKCAjw-qi_BhBxEiwAkxvbkOCzyc7EAQEBSUkjC1KFRLGy3Lq_d3K6vAXVzEw7T8HiguetYcauCGBoCf-MQAvD_BwE.



- A recommended article: <https://modernfarmer.com/2013/04/how-to-fell-a-tree/>
- A recommended PDF: <https://extension.uga.edu/publications/detail.html?number=C1220&title=chainsaw-safety-the-five-step-tree-felling-plan>