

# Chain Saw Safety

## Tools & Materials:

- Hardhat
- Safety glasses
- Ear protection
- Long sleeves & pants
  - Bow saw
  - Chain saw
  - Wedge(s)

## Things to remember:

- Never let the chain touch the ground
- Never touch the nose of the bar to anything
- Always use both hands to control the chain saw

## To Remove Mature Trees:

1. The first and most important step in cutting down a tree is determining where you want it to fall. This area (called the felling path) should be far away from buildings, power lines, streets and anything else you do not want damaged. It should also be twice as long as the height of the tree and twice as wide as the tree's canopy. If these conditions cannot be met then this is probably not a do it yourself weekend project and you should use a professional tree removal contractor.
2. If you decide you have the room and the confidence then you need to understand some key terms and concepts.
  - Felling path: This is the path you want the falling tree to take. It is the number one danger area and must be kept clear at all times.
  - Retreat paths: These are the two safe escape routes you need to plan and keep clear at all times. They are located diagonally away from the felling path. The retreat paths are your way out.
  - The area directly opposite the Felling path: This is the number two danger area. It has happened that a tree (because of an imbalanced canopy or structural bend) has fallen in the opposite direction from what was expected. Think about this area when you are determining whether or not to tackle this project.
  - The Notch: The notch is a triangular section of the trunk which is removed. It is on the side of the trunk that faces the direction you want the tree to fall. The first cut made is at a 45° angle about 1/3 of the way into the trunk. The second cut is a straight cut (parallel to the ground) below the first cut.

- The Felling Cut: This cut is made on the opposite side of the trunk from “The Notch.” It is also a parallel – straight cut about 2" above the base of “The Notch” and stops 3" to 4" away.
- The Hinge: The Hinge is the 3" to 4" section left between “The Notch” and “The Felling Cut.”

STEP 1: Remove all branches below head-level. Use a hand bow saw for this operation. It is dangerous to use a chain saw in tight quarters. First saw upward on each branch an inch or so and then cut downward until the branch breaks away. Be sure to remove these branches out of the area.

STEP 2: Using the chain saw make “The Notch.” Be sure to remove “The Notch.” Be careful to only go 1/3 of the way through the trunk.

STEP 3: Make “The Felling Cut.” **WARNING – DO NOT CUT THROUGH THE TRUNK!** Be sure to leave the 3" to 4" “Hinge.”

STEP 4: Immediately after making “The Felling Cut” insert a wedge into the cut. This prevents the tree from becoming unstable and twisty. Secure the wedge by **GENTLY** tapping it until it is snug. **DO NOT USE THE WEDGE TO PUSH THE TREE OVER!**

STEP 5: Double check that the area around the tree is clear. Push the tree, with your hands, toward the felling path and run along an established “Retreat Path.”

STEP 6: Hold the chain saw with both hands, take a balanced stance and cut down on branches that are on the other side of the trunk. Keep the trunk between the branch you are cutting and yourself at all times. Do not allow yourself to become entangled in the canopy. Remove the branches as you go. If you are sawing and someone else is removing the branches establish a system and hand signals before you start. Remember that both of you will need basic safety gear; a hardhat, safety glasses, ear protection and long sleeves & pants.

Keep everyone a safe distance from the chain saw at all times. Be careful, go deliberately, and remember the three safety items:

- Never let the chain touch the ground
- Never touch the nose of the bar to anything
- Always use both hands to control the chain saw

STEP 7: When cutting the trunk you must be concerned with binding the chain bar. After cutting about 2/3 of the way through the trunk roll the trunk and finish by cutting downward until the section breaks away.

**Safety First! Take your time and be careful.**