Workplace Safety North™

Resource

Safe tree felling

Don't rush the cut!

The felling system

To control the direction in which a tree falls when using a chainsaw, you need to be familiar with the **notch**, the **backcut**, and the **hinge**.

What it is	How it is used
Notch: Wedge of wood cut from a tree's trunk in the direction of the fall, cut on the side facing the intended fall direction of fall	• Usually cut to one third of the tree's diameter • Width is as open as it is deep, creating a 45-degree angle that closes as the tree falls • When the tree has fallen about halfway to the ground, the notch closes, the holding wood breaks, and the tree starts to fall
Backcut (felling cut): Made directly opposite the notch to sever enough wood fibres to reduce the strength of the tree to the point where it can start to fall.	• Made slightly above the level of the notch (1-2 inches) to create a small step against which the falling tree butt pivots to prevent it from sliding backwards toward the chainsaw operator • Backcuts made too high can hold the tree on the stump longer as backcutting continues; this results in little-to-no vertical fibres left (holding wood), creating an out-of-control free falling tree
Hinge: Strip of wood left uncut between the notch and the backcut, which controls the direction of fall.	• Typically has a thickness of about one-tenth the tree's diameter (in an 18-inch tree, the notch would be cut to a depth of about six inches, and the backcut would come in from the other side to a depth of about 10 inches) • Allows the tree to bend forward or backwards only (prevents sideways motion) • Starts to bend and guides the tree until it falls in the right direction

For more information, **contact Workplace Safety North**.