



TIM'S TIPS



THE FELLING PLAN

Timber harvesting and competitive sports have many similarities. Both require skilled professionals, teamwork, communication, and a good game plan. Perhaps the most important is the plan for without it, there would be no consistancy in the way timber harvesting is accomplished.

The following elements are an integral part of any good tree felling plan:

- **1. Identify Potential Hazards** Look up into the crown of the tree and identify dead limbs and hanging branches that could possibly fall on you as the tree begins to fall. Also assess the area into which the tree will fall for hazards. Clearing ground debris and live saplings or shrubs within the immediate vicinity of the designated tree is very important. Make a mental note of where these hazards are and be alert for any that might dislodge as the tree falls. Once the tree's on the ground, pause to observe any residual trees that are still swaying for any limbs that might fall.
- **2. Determine Side or Weighted Lean** Most trees lean to one side or the other. Side lean determines the good and bad side of the tree with respect to the side the chain saw operator should finish on. It is desirable, but not always possible, to cut from the good side of the tree. The bad side of the tree is the side to which it leans or is weighted. It is possible to have the tree's trunk leaning one way and to have the majority of the tree's crown on the opposite side. While standing back from the tree along the felling line, the operator should look up into the tree and draw a circle around the outer-most limbs of the tree's canopy. From the center of this imaginary circle, drop an imaginary plumb line to the ground. The distance from this spot on the ground to the center of the tree's trunk gives a good estimate of the amount of weighted side lean.
- **3. Determine Your Escape Route** Always pick a "retreat route" away from a falling tree. This escape route should be clear of ground debris and should be opposite the direction of fall and at a 45 degree angle.

4. Determine the Hinge Size - To control the fall of a tree, a hinge is necessary. Setting up the right length and thickness of hinge are important to avoid pulling fiber from the butt log as the tree falls. As a general rule of thumb, use 10% of the diameter of the tree at D.B.H. (4.5 feet above the ground) for the thickness of the hinge. It should have equal width across the stump. For example, a 15-inch tree should have a hinge 1.5 inches thick. After felling a few trees, look to see if you're getting fiber pull. If so, reduce the thickness of the hinge. Hinge thickness will vary by species, also.

The length of the hinge is also important in guiding the direction of fall. The general rule of thumb here is to set up a hinge length that is 80% of tree's diameter at D.B.H. A 15-inch tree would need a 12-inch hinge. Some trees with heavy side lean will require a hinge of greater length.

5. **Establish Your Cutting Plan.** After the notch and hinge are set up, how do you intend to finish the back cut? This cut should be level with the open face notch. Always remember to finish the back cut on the good side of the tree. If this is not possible, be aware of hazards that could cause safety problems. If problems arise, reassess the situation before falling the tree.