

ROPE METHOD FOR FELLING HANGERS

SUMMARY

There are multiple means of mitigating the risks associated with hazardous trees. This paper primarily discusses the Rope Method for falling trees that are leaning/hanging in adjacent trees.

INTRODUCTION

In the event that a tree needs to be fallen to mitigate risk, many alternatives to falling the hazard tree exist, these alternatives include

- Leave the tree Leave the tree if leaving it out weighs the risk of taking it (i.e., the safety of others is not at risk; therefore, it is best to leave the tree). If you choose to leave the tree, flag the line near the tree with bright ribbon and attach a note explaining the hazard. Contact all adjacent crews to inform them of the hazard. A flag and note is not needed for safely hung trees, as for the overuse of flagging can desensitize people of real hazards.
- Heavy equipment Loggers are very accustomed to using heavy equipment to remove hangers. Go through the appropriate channels to set this up.
- Explosives An individual may also request a blaster to fall a hung tree.
- Driver The practice of falling another tree into the hung tree (a driver) is not recommended as for this practice can lead to two or more trees becoming hung up.

Falling hazardous trees is what it is, it's hazardous. There are multiple means of bringing a tree to the ground safely; this paper discusses the Rope Method to felling hung trees. The Rope Method is an alternative to the bucking-style of felling hangers. It is important to restate that not all trees can be brought down safely; therefore, one must be able to recognize when to leave a tree, even if doing so drastically increases the workload of one or many individuals.

ROPE METHOD

Size Up

A complete size-up must be performed prior to executing any action towards placing the tree on the ground. Essential to hangers, the feller must also be sure to determine

- the extent of the lean
- by what means is the tree hanging and/or leaning (i.e., are the limbs and/or the bole involved). If the tree is hung up in the bole of the other tree, usually the tree is hung-up well.
- whether the hanger is dead, alive, or rotten
- the species, the health, and stress upon the holding tree
- whether the base of the hanger and root system is solid

Basically, determine whether the tree is hung solidly or if it might come out while people are under it.

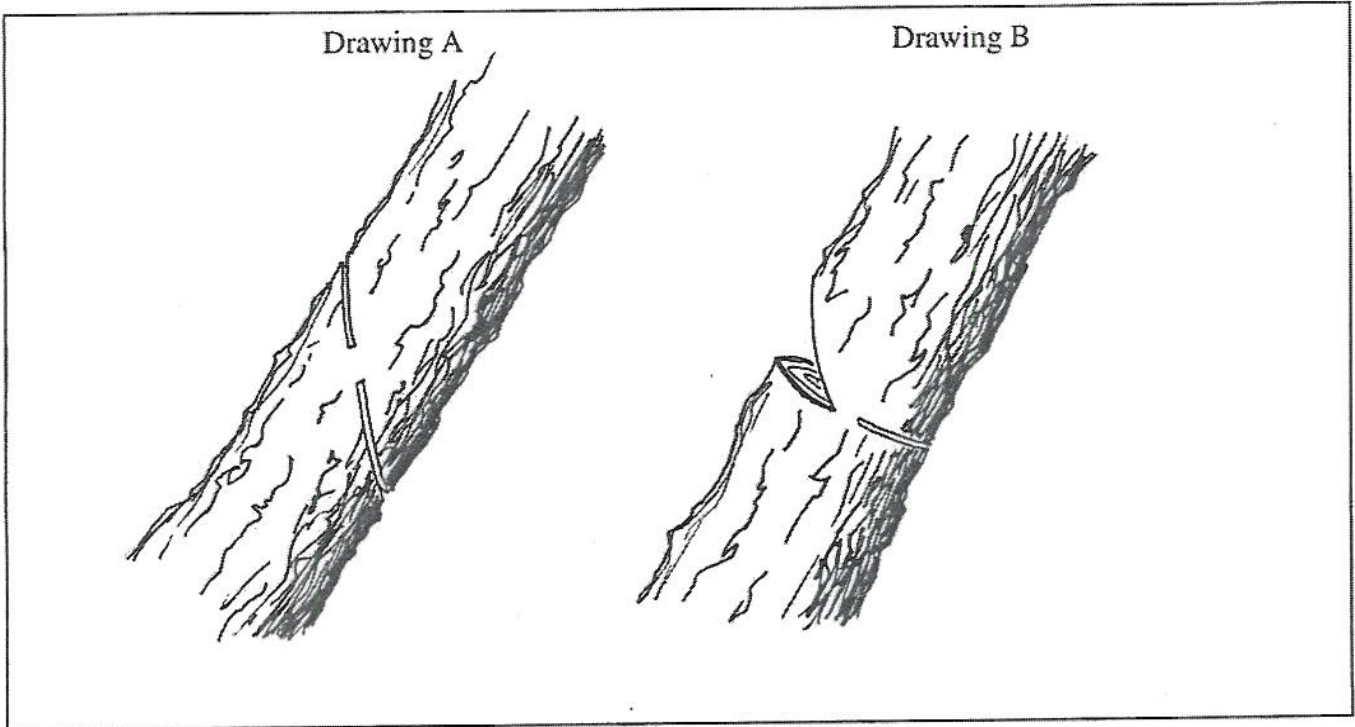
Make a Plan

Have a plan before you cut. When dealing with a leaner, do not initiate any actions without a plan. Determine where the butt of the tree needs go in order to allow the tree to come out. Additionally, determine what actions would allow the tree to become hung up more solidly. After each piece is cut, size the tree up again. Each cut will create a new situation.

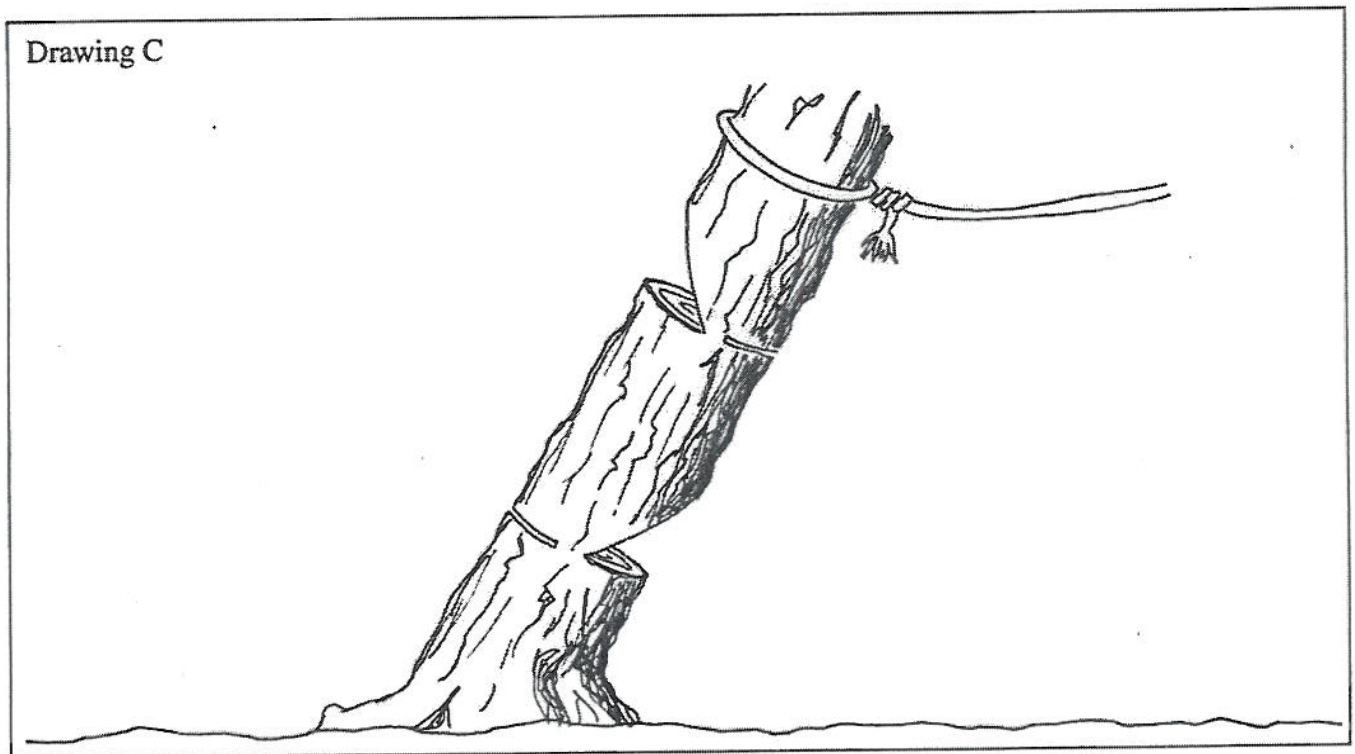
Type of Cut

Use a pie cut, it will fold the tree slower and will give the sawyer more time to escape. Pie cuts allow the sawyer to guide or direct the fall of the butt.

Cuts without a pie cause the tree to drop straight down. This cut causes the tree to move too fast and will not leave adequate time to clear the area (Drawing A). With the Rope Method the pie cut is on upper part of the bole (Drawing B).



If the hanger stump is solid (not burned off or rotted away) you will need two pie cuts (Drawing C). This allows the tree to fold in two places. Note: the lower pie is on the under side of the log; the upper pie is above and opposite. These hinges need to be parallel.



Rope Trick

Decide where the butt that you are cutting needs to go to best accomplish what you want (i.e., make it hang solid or take it out; Drawing D).

Aim your Pie cut for the spot that you have selected. After the pie cut is in, tie your rope above the cut (use any type of rope from p-cord and hose to cargo nets).

You need to have an escape route cleared out in case the tree goes before you are ready. Once the rope is laid out, make your back cut. It is better to cut too little and have to go back in than to cut too much and have the tree fall while you are still in the impact area. Cut the off side first and be ready to use the escape route.

Twenty to thirty feet of quarter-inch rope works well. You may be in position to go out your escape route and pull it yourself or you may need more pullers. The sawyer will clear the area before the rope is pulled. The point is that no one should be in a dangerous place when the tree comes down.

Drawing D

