

2-Ease of bucking

When trees are felled on uneven or rolling ground; they may lie with a strain so that **they will bind the saw or **tend to split in bucking.

Saw bind due to sagging during bucking can be overcome by driving a wedge into the saw cut.

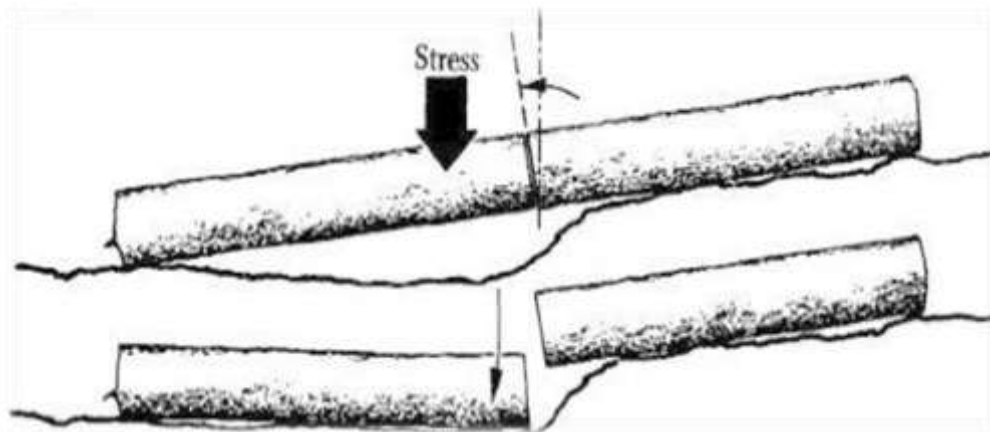


Fig. 1: Felling tree on uneven ground

3- Damage to reserved trees

This requires skilled felling crews who are willing to use care in undercutting and felling to direct the trees into open places and minimize damage to residual trees.

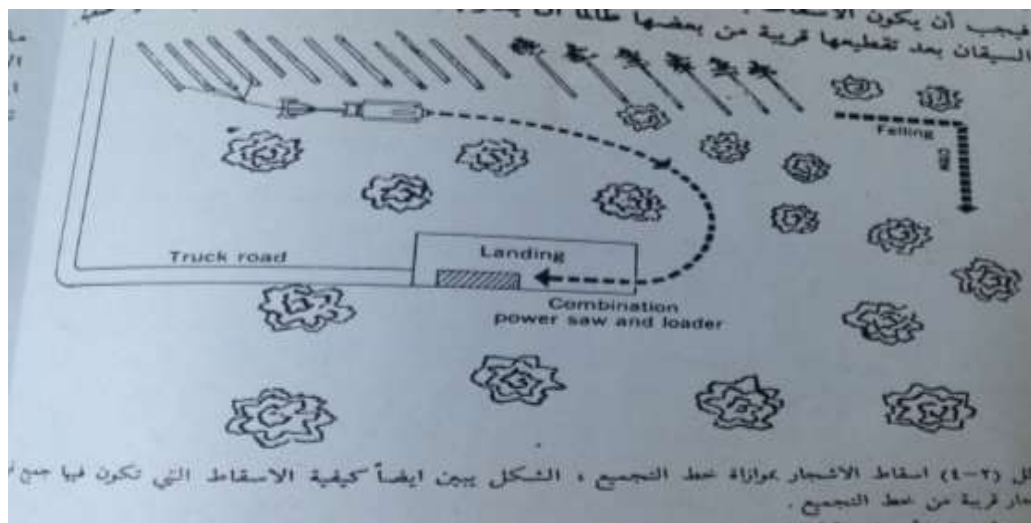
**hollow or rotten trees break sooner than sound trees when being felled and frequently fall in directions contrary to the workmen's intention.



Fig. 2: Broken of Rootn tree and its damage to other trees

4-Method of bunching and skidding

If possible, trees should generally be felled parallel to the direction of skidding, especially when skidding is carried on simultaneously with felling and bucking. This permits the **chokers** to be placed on several logs at one time, with a minimum amount of backing and stopping by the tractor to hook on a turn.



5-Slope

- 1- In a mountainous country, trees must be felled according to the topography.
- 2- Trees on steep ground should be felled along the contour so that they will strike horizontally.
- 3- The felling of a tree up a steep slope invites damage to the tree and injury to workers because it strikes the ground while pressure is still against the stump.

A kickback occurs when a tree strikes upward-sloping ground while its weight is still on the stump pressing against the hinge ledge. As the butt bounces when the tree strikes, the tree kicks backward over the stump.

6-The trees characteristics

- 1- Seldom trees are perfectly straight and evenly balanced. Most incline in one direction or have heavier limbs on one side. Hence, if simply cut off the stump, a tree naturally falls in the direction of its lean or toward the side with heaviest limbs.
- 2- Some trees have fire scar or decay at one side of their base that influences the normal direction of fall.
- 3- Small trees (pulpwood) up to 12 to 15 (inch) in diameter can be forced to fall directly against their lean and often are so directed by means of a pushing pole or lifting jack.

7- Other considerations

- 1-It is necessary, to avoid felling trees on fences, fire lines, telephone and power lines, public roads, and other improvements.
- 2-keeping skid road open is necessary if extra cost for opening them is to be avoided.
- 4- Wind must be always being considered in tree felling. In high winds and gusty weather, felling should have stopped (cease), as a safety precaution.

