

## Crawler Rolls Back and Crushes Operator

A crawler operator received severe pelvic injuries when crushed between his machine and a log.

### What happened

A small logging crew was clearfelling and extracting eucalypts on a woodlot.

Trees were being felled on a short slope. After felling, they were generally stroped up and the weight taken, preventing the logs rolling downhill and through the fence as they were headed off.

The crawler returned to the felling face after completing a drag. In preparation for the next drag, the operator backed the machine down the short slope to within a metre of a log from the flat above. He applied the brake, lowered the blade and got out to strop up for himself.

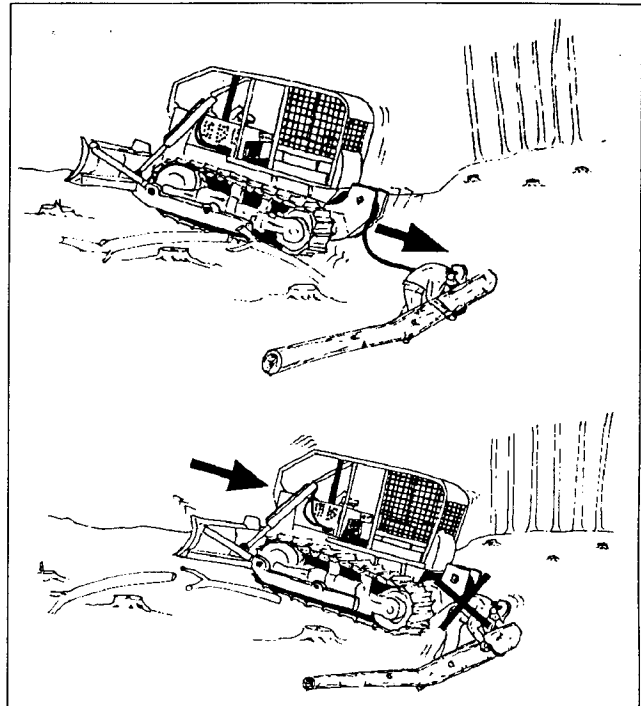
As he was stroping up the log, the machine crept back and he was crushed between the machine and the log.

A fellow worker, who saw the accident but could not prevent it happening, drove the machine off the operator and upslope to flat ground.

Crush and fracture pelvic injuries will keep the operator off work for six months.

### Accident cause

- The brake does not appear to have been applied securely.
- The blade was lowered but floating and provided little anchorage.
- Working downhill from a driverless machine parked on a slope when there were other alternatives.
- Taking short cuts.



### Prevention

- Apply brakes to their full capacity.
- To obtain maximum anchorage, downward pressure should be applied to the hydraulic ram.
- If there are hazards, a breakerout should be used and the operator can remain at the controls.
- In this instance, the machine should have been parked on flat ground and the rope run out the 20 metres to the log.

These preventative moves are confirmed by the operator who said to Fletcher Challenge *Safety Alert...*

“I’ll never get behind a machine on a hill again... that’s for real. And I’ll never trust handbrakes again. Looking back at the accident, I should have parked on top of the hill and pulled the rope down to the log. I was in a hurry too, which is not good practice”.

# Tragic Death in Firewood Gathering

A farmer felled a tree into a double leader. As he tried to pull it free, a leader broke and struck the farmer as he ran away from it.

## What happened

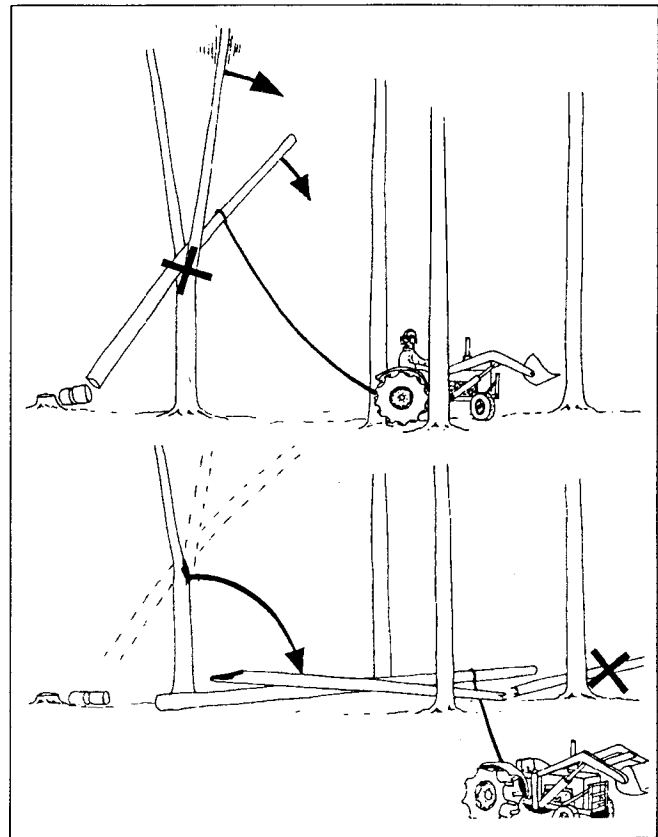
A farmer was felling trees for firewood. The farmer had felled a tree 27 metres tall and 50 centimetres at the butt. Unfortunately, the tree did not fall in the intended direction of fall and landed in the forks of a double leader, 3.3 metres above the ground. In reconstructing the scene, it is probable that he positioned the tractor beneath and raised the bucket, climbing on to it to reach the tree and attach a 9 millimetre x 11 metre wire rope to it. He then attached the rope to the tractor and attempted to pull the tree from the fork. With the weight of the pull, one of the leaders, 32.3 metres in length, broke away and fell towards the tractor.

The farmer saw the leader falling and leapt from the tractor, which had no protective canopy, as it appeared that the leader may hit him. However, the leader hit another tree and broke 13.6 metres from the butt end and the longer top part fell at an angle away from the tractor and hit the farmer as he tried to escape.

## Accident cause

This tragic accident resulted from lack of knowledge of the basic rules that have been developed in forestry work.

- Lack of experience in logging and felling large trees.
- Disregard for the "two-tree-length rule".  
To quote from the current logging code:  
"No person shall move forward within two tree-lengths of the intended direction of fall of any hung-up or cut-up tree, or the direction of fall of any hung-up tree."
- Using a pulling rope that was far too short to place the tractor in a safe position out of reach of any falling debris.



## Prevention

- Training and/or experience in logging and tree felling.
- Observing the "two-tree-length rule" when dealing with hung-up or cut-up trees.
- Using correct equipment when attempting to pull down trees. Machinery used for this type of work should:
  - a) be of sufficient capacity to handle all aspects of the operation;
  - b) have a rollover protective structure (ROPS) and a falling object protective structure (FOPS); and
  - c) have an adequate winch with sufficient rope to be able to place the machine in a safe position when pulling is commenced.

Together with back-pulling and working in windthrow, dealing with hung-up trees is a dangerous job and should only be tackled by experienced people or with an experienced person giving direct supervision.