

FELLING TECHNIQUES FOR WINDTHROWN TREES

B. VINCENT.  
L.F.I.T.B.

Some of the methods used during recovery of storm damaged forest in the central plateau of the North Island during 1982

---

The damage was spread over a large area of the central plateau of the North Island and included damage to most aged groups of exotic trees as well as areas of native trees in National Parks throughout the area.

Our main concern was for the people who were directly involved in the recovery of large exotic plantations, which presented great danger to the workers involved.

Some of the hazards faced by these people:-

- the butting off of uprooted trees under tension.
- the felling of standing spars with no tops and little if any recognisable lean
- the felling of badly wind wrenched heavy leaning trees
- the unstable condition of the trees in partially windblown areas which had to be left standing
- the extraction and maximum recovery of the damaged material

Initially the task appeared monstrous and the dangers involved the same. However with a planned approach and an awareness of the hazards involved and the need for "safe work practices" at all times, recovery got underway. In most cases the roading and skid sites were made parallel to the blow down and logs extracted by the butts. Methods and techniques for butting off were circulated to those involved as were the methods for felling spars and heavy leaners. These methods had been devised and used by other people who had faced similar situations in the past.

Supervision had to be close and constant reminders of "safe work habits" given. On-job instruction by trainers working alongside inexperienced men proved very successful. The fact that many loggers were already trained and certificated in "safe work methods" proved an advantage during the hazardous conditions resulting from the windblow.

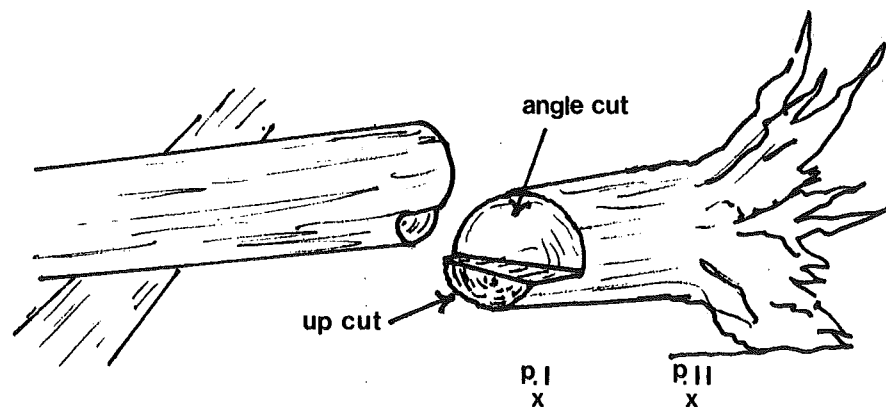
In addition to the techniques described in the previously circulated notes on "handling wind throw", a method of "butting off" was developed by K.L.C. Logging Trainers during the recovery which proved very effective and was

used successfully. The method has been fully considered by the Logging and Forest Industry Training Board and the Trainers and Assessors group and it is fully recommended.

### Butting Off

If there is a risk of the log springing up and sideways when released:-

1. Make an up-cut of approximately one third of the tree's diameter, or until the cut starts to close (from position I)
2. Take up position II and make the top cut at an angle, cutting the furthest wood first. Cut can be completed with the forward portion of the bar only. By doing this the cutter's body is clear of the log's movement.



### Trees with No Tops

1. Be aware of shattered tops and stress fractures.
2. Use a wedge or felling lever on any trees that do not have a definite lean.
3. Relate the back cut and hinge wood to the scarf over the full diameter of the tree.
4. Use a two level back cut if necessary to place the wedge or lever before the tree sits back.

Heavy Leaning or Badly Wind Wrenched Trees

1. To avoid pinching guide bar, offset the scarf slightly from the direct lean of the tree.
2. Bore in behind the scarf and cut back, leaving the correct hinge and sufficient anchor wood opposite the scarf to hold the tree in position.
3. Complete the back cut by cutting the anchor wood, using the forward portion of the bar and cutting towards the scarf on a lower plane than the bore cut.