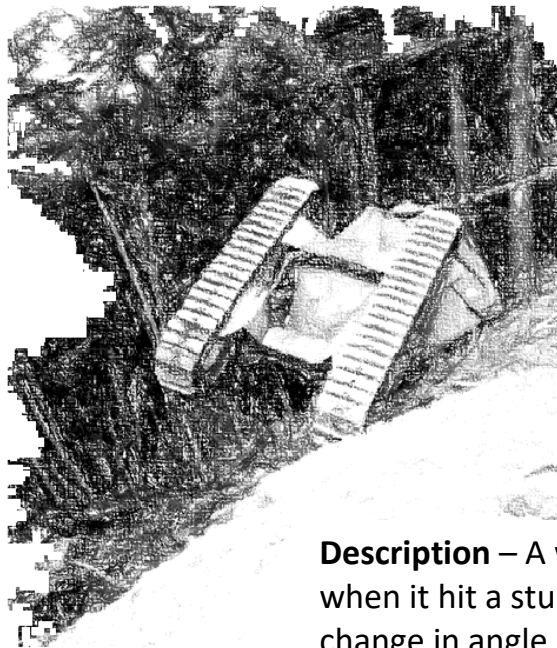


Tethered Felling and Winch Machine Rollovers



The **Approved Code of Practice** at clause 6.2.2 states “...Where the stability of mobile plant is compromised by slope, weather or ground conditions then a specific hazard management plan shall be developed, implemented and monitored.”

While **section 6.4** has specific rules for ‘winch-assisted harvesting on steep slopes’ machine stability on slopes is a fundamental requirement.

NOGGIN INC2170 23/03/20 – Property Damage.

Description – A winch-assisted felling machine was sidling around hill when it hit a stump, causing the winch rope to tighten. Due to a change in angle, once the rope tightened it tipped the machine over.

NOGGIN INC2539 22/06/20 – Property Damage.

Description – A sudden release of the tether (rope) from around a stump changed the angle of the rope so that it was out of lead from the machine placement. Unaware, the operator proceeded to make a line shift. The angle pulled the winch machine over causing damage to the Operator Protective Structure (OPS), its windows and the tether ropes, all of which needed to be replaced.



Injuries – No! Costly Damage – Yes!

Over the last two years there have been eight rollovers of felling machines and one of a winch machine. The operators have not been injured, apart from scratches, bruises, and shock, nonetheless, these events have caused significant property damage and downtime and the repair costs have come at an unwelcome time for the Contractors involved.

Rollovers – What are we Finding?

Apart from some main causes, attributable to planning, machine positioning and a loss of rope tension during critical times e.g. line shifts there are **three other factors** that have kept surfacing during investigations:

- **Production Pressure** – coupled with slow going e.g. due to piece size and/or undergrowth.
- **Experience** – or not being fully trained and/or left without supervision and/or SBO's completed.
- **Poor Ground Conditions** – which have destabilised the setup¹ and should not have been operated on.



Managing Risk – Recommendations!

1. Ensure that felling and winch machines are parked in stable positions when performing line shifts, especially when the tether rope(s) are tightening.
2. Ensure that the most experienced person on the job has oversight of the planning – right down to the 'setup' – ¹ the placement of machinery and the lines operators will work on.
3. If using anchors these should be selected, positioned, and/or constructed by a competent person and checked daily. So too, independent winch systems.
4. Double check ground conditions to ensure maximum holding of the winch machine.
5. The WorkSafe NZ fact-sheet '[Winch-assisted harvesting on steep slopes](#)' notes that PCBU's should consider emergency back-up systems (that would help an operator to meet the requirements of ACOP 6.4) e.g. a warning device to warn the machine operator of anchor movement.
6. PF Olsen also requires four-point harnesses and the wearing of strapped helmets.
7. Focus on training and learning – noting that there are NZQA unit standards available. Call on the skills of mentors and have them come and review how you are operating.
8. Read information published on other incidents e.g. on the Safetree website – see <https://safetree.nz/wp-content/uploads/2018/09/Alert-Machine-Rollover-2017.pdf>