

Title	Fell trees using machine pushing assistance		
Level	4	Credits	5

Purpose	<p>This unit standard is intended for people employed as tree fellers in a commercial forest harvesting operation.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the use of a machine to push trees to assist tree felling; prepare for tree felling where machine assistance is required to push trees; and fell trees using machine assistance to push trees.</p>
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Classification	Forestry > Tree Felling
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Available grade	Achieved
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Prerequisites	Unit 28560, <i>Fell trees in a commercial forest harvesting operation</i> ; or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 Legislation relevant to this unit standard includes the Health and Safety at Work (HSW) Act 2015; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and any subsequent amendments.
- 2 References
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <https://worksafe.govt.nz/>.
 New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.
- 3 Tree fellers often require the use of a machine to assist in felling trees growing along boundaries, close to environmentally sensitive areas, within two tree lengths of roads, close to physical structures, and in other hazardous situations. Tree fellers using machines to assist in felling trees are responsible for the safety of the machine operator, the observer, and any other person directly involved in the felling. Machines suitable for pushing trees include wheeled and tracked excavators.
- 4 Definitions
Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

PPE refers to personal protective equipment and may include but is not limited to high-visibility, protective clothing, gloves, face and eye protection, safety helmet, footwear, hearing protection, and safety devices.

Worksite procedures refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

5 Assessment information

This unit standard must be assessed on-job.

All activities and evidence must meet worksite procedures and accepted industry practice.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the use of a machine to push trees to assist tree felling.

Performance criteria

1.1 Situations where machine pushing of trees may be required are described.

Range difficult trees and sites, environmental considerations, hung-up trees, cut-up trees.

1.2 Rules for machine pushing of trees are described.

1.3 Tree felling techniques involving machine pushing are explained.

Range machine requirements, machine positioning, observer, communication, scarf alignment, quarter cut back cut.

1.4 Hazards and associated risks specific to machine pushing of trees are identified and control measures are explained.

Range may include but is not limited to – tree movement, slope, ground conditions, logging debris, overhead hazards, insufficient hinge wood remaining, pushing point slipping off the tree stem, unexpected movement of machine or attachment, poor communication, obstructed visibility.

Outcome 2

Prepare for tree felling where machine assistance is required to push trees.

Performance criteria

2.1 PPE is maintained and worn.

2.2 Personnel capability is checked to meet the requirements of the tree felling situation.

Range equipment, skills, number of people.

2.3 Requirements and responsibilities for all aspects of the operation are communicated to personnel.

2.4 Communication is established between all personnel involved using recognised industry verbal instruction and/or hand signals.

2.5 Factors affecting machine suitability are described.

Range may include but is not limited to – access, slope, ground conditions, machine capability, pushing point; evidence of four is required.

2.6 Felling method is determined according to the conditions on site and the resources available.

Range direction of fall, safety, equipment, method to be employed.

Outcome 3

Fell trees using machine assistance to push trees.

Performance criteria

3.1 Site and trees are assessed and felling plan determined and communicated to others involved.

3.2 Work area and escape route are prepared by the feller.

3.3 Felling is carried out.

Range sequence of cuts, timing of cuts, machine positioning, communication, use of safe area, timing of push.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 May 2008	31 December 2013
Revision	2	15 September 2011	31 December 2016
Review	3	19 March 2015	N/A
Review	4	25 June 2020	N/A
Rollover	5	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference

0173

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.