

Title	Use tree jacks to fell trees		
Level	4	Credits	10

Purpose	<p>This unit standard is intended for tree fallers who use hydraulic tree jacks to fell trees.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the use of tree jacks in tree felling; fell trees using a single tree jack; and fell trees against their lean using double tree jacks.</p>
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Classification	Forestry > Tree Felling
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Available grade	Achieved
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Prerequisites	Unit 28561, <i>Plan and fell trees using advanced techniques in a commercial forest harvesting operation</i> ; or Unit 28562, <i>Fell and clear hazardous trees</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, Resource Management Act 1991; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and the Heritage New Zealand Pouhere Taonga Act 2014, and any subsequent amendments.
- 2 References
New Zealand Forest Owners Association, *Forest Practice Guides (2019)*, and any subsequent amendments, available from <http://www.nzfoa.org.nz>
Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from <http://www.worksafe.govt.nz>.
- 3 Definitions
Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
Worksite procedures refers 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.

4 Assessment information

This unit standard must be assessed on-job.

All activities and performance criteria must meet the requirements of worksite procedures and accepted industry practice.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the use of tree jacks in tree felling.

Performance criteria

- 1.1 Situations which may require the use of tree jacks are described.
- 1.2 Communication between the tree faller and jack operator is explained.
Range audible and/or hand signals.
- 1.3 Hazards associated with the use of tree jacks in felling are described.
- 1.4 The rules for felling with tree jacks are stated.
- 1.5 Methods for using tree jacks are explained.
Range using two jacks, using one jack.
- 1.6 Selection criteria for jacks are described.
Range jack capacity, tree weight.
- 1.7 Limitations of the hinge and methods to manage limitation are explained.

Outcome 2

Fell trees using a single tree jack.

Performance criteria

- 2.1 The lean of the tree to be felled is assessed, sufficient work space cleared, the escape route established, and the scarf is cut.
- 2.2 The position of the block to take the jack is measured and marked.
Range jack position, block size, back cut height.
- 2.3 The block is cut out and the jack is set.
Range block seating, minimum wood removed.
- 2.4 The jack is placed and extended to take the weight.

2.5 The back cut is made, and the hinge wood is set.

2.6 The jack is extended to lift the tree.

Outcome 3

Fell trees against their lean using double tree jacks.

Performance criteria

3.1 The lean of the tree to be felled is assessed, sufficient working space is cleared, the escape route is established, and the scarf is cut.

3.2 The position of the blocks to take the tree jacks are measured and marked.

Range jack positions, block size, back cut height.

3.3 Blocks are cut out and the jacks are set for felling.

3.4 Jacks are placed and extended to take the weight.

3.5 The back cut is made, and the hinge wood is set.

3.6 The jacks are extended to lift the tree.

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 2017
Review	2	10 December 2015	31 December 2017
Revision	3	19 January 2017	N/A
Review	4	23 July 2020	N/A
Rollover	5	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	0173
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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.