

40726**Prepare for and execute machine-assisted tree felling as a machine operator**

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	<p>People with this skill standard will be able to conduct comprehensive site inspections, prepare sites for machine-assisted tree felling operations, and execute assisting a tree faller when operating a machine. Emphasis is placed on safety, teamwork, environmental protection, acceptable industry practices and adherence to worksite procedures.</p> <p>This skill standard aligns with the New Zealand Certificate in Forest Harvesting Operations (Level 4) [Ref: 4175] with strands in Cable Extraction, Ground Based Extraction, Mobile Cable Yarder, Head Breaker Out, Loading, Log Making, Mechanised Felling, Mechanised Processing, Spotting, Swing Yarder Extraction, and Tree Felling.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Assess site conditions for tree felling operations.	a. Inspect tree stability, hazards, and machine accessibility, providing feedback to the tree faller.
	b. Evaluate site layout and terrain to identify risks and ensure suitability for safe operations as directed.
2. Support escape route clearance and machine placement for machine-assisted tree felling.	a. Assist in maintaining clear and safe escape routes as directed with a determined retreat distance.
	b. Position machinery based on site evaluation and instructions from the tree faller.
	c. Support the planning and clearing of escape routes under instruction from the tree faller, ensuring they are free of obstacles.
3. Conduct pre-tree felling checks and monitor tree stability.	a. Perform checks to assess the machine's readiness for operations, including reach, traction, and stability.
	b. Assess the stability of the tree being felled and provide feedback to the tree faller including any signs of instability.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
4. Coordinate push and pull operations for safe tree felling.	a. Collaborate with the tree faller to support the determined felling direction and method.
	b. Use the machine to stabilise and assist in tree felling under the tree faller's guidance, adjusting as instructed.
	c. Demonstrate assisting the felling of nine trees, minimum three pushes, minimum three pulls with grapple and/or three pulls with a rope.
	d. Describe the differences between using a grapple to pull trees to the ground verses using a rope to pull trees to the ground.
5. Maintain communication and monitor the tree felling process.	a. Use reliable communication devices to ensure clear coordination with the team.
	b. Monitor operations and provide feedback to the tree faller or site manager, adjusting as directed.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Akōnga/learners must be assessed against this standard in a work environment, using naturally occurring evidence.

All activities and evidence must meet the requirements of worksite procedures, accepted industry practice (Best Practice Guides, BPG) and any subsequent amendments to legislation and Approved Code of Practice (ACOP).

All activities relevant to this standard should reflect ngā kaupapa (the principles) o te Tiriti o Waitangi.

All activities should, as relevant to candidates and/or this standard, reflect the peoples of the Pacific and other cultures, and their world views.

Definitions:

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider tree felling industries as examples of best practice.

Comprehensive site inspections involve assessing tree stability, terrain, hazards, machine access, and escape routes to ensure safe and effective machine-assisted felling operations.

Kotahitanga denotes unity and collective action, promoting togetherness and solidarity within the community.

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.

Recommended skills and knowledge:

It is recommended that people hold credits for standard 27965, *Operate a forest industry machine*, or demonstrate equivalent skills and knowledge, before being assessed against this standard.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Site Assessment:

- Identifying hazards and providing feedback the faller on environmental risks and tree stability.

Escape Route Management:

- Assisting in planning and maintaining clear, accessible evacuation paths.

Machinery Operations:

- Positioning and using equipment under direction for stability and efficiency.

Equipment assisting operation:

- Excavator, skidder, bulldozer fitted with FOPS, ROPS, OPS or COPS.

Attachments:

- Fixed/swinging grapple (push/pull), felling head (push/pull), winch (pull), blade (push), arche (push), rope (pull), bucket (push).

Team Collaboration:

- Kotahitanga following instructions and supporting coordinated efforts to ensure safety.

Problem-Solving:

- Responding to challenges such as terrain changes, weather conditions, splits or root disturbances as directed.

Communication:

- Methods radios or visual signals.

Rauemi | Resources

Legislation relevant to this skill standard includes but is not limited to:

- New Zealand Forest Owners Association, Forest Practice Guides (2019), and any subsequent amendments, available from www.nzfoa.org.nz.
- Safetree wellbeing and safety resources and initiatives for the plantation forestry industry, available from www.safetree.nz/.
- Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations, December 2012, available from www.worksafe.govt.nz.
- Health and Safety at Work (HSW) Act 2015.
- Heritage New Zealand Pouhere Taonga Act 2014.
- Resource Management Act 1991.

- Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018.

and any subsequent amendments or replacements.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Muka Tangata – People Food and Fibre Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Agriculture, Forestry and Fisheries > Forestry > Machine Operations - Forestry
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0052

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	29 May 2025	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2030		

Please contact Muka Tangata – People Food and Fibre Workforce Development Council at qualifications@mukatangata.nz to suggest changes to the content of this skill standard.