

1XXXXX Prepare for and execute machine-assisted tree felling as a machine operator

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	People with this skill standard will be able to conduct comprehensive site and tree assessments, 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.

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 felling operations	a. Inspect tree stability, hazards, and machine accessibility, providing input to the person in charge.
	b. Evaluate site layout and terrain to identify risks and ensure suitability for safe operations as directed.
	c. Support the planning and clearing of escape routes under supervision, ensuring they are free of obstacles.
2. Support escape route clearance and machine placement	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 person in charge.
3. Conduct pre-felling tests and monitor tree stability	a. Perform tests to assess the machine's readiness for operations, including reach, traction, and stability.
	b. Identify signs of instability and report them to the person in charge.
4. Coordinate push/pull operations for safe felling	a. Collaborate with the tree faller to support the determined felling direction.
	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 a minimum of nine trees, three push, three pull with grapple and three pull with a rope.
5. Maintain communication and monitor the 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 and accepted industry practice.

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

All activities must, 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.
- **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.
- **Kotahitanga:** Denotes unity and collective action, promoting togetherness and solidarity within the community.

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 input 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

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

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 > Forest Harvesting
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0173 This CMR can be accessed at: http://www.nzqa.govt.nz/framework/search/index.do

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	[dd mm yyyy]	N/A
Arotakenga Review	<type here>	[dd mm yyyy]	[dd mm yyyy]
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	[dd mm yyyy]		

Please contact Muka Tangata at qualifications@mukatangata.nz to suggest changes to the content of this skill standard.