

Title	Carry out forest pre-harvest inventory sampling		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the requirements for a forest pre-harvest inventory; establish and measure a sample plot for pre-harvest inventory; demonstrate knowledge of and collect data for pre-harvest inventory.
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Classification	Forestry > Forest Mensuration
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Available grade	Achieved
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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 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 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.
- 4 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 requirements for a forest pre-harvest inventory.

Performance criteria

- 1.1 Management requirements and functions are explained for a pre-harvest inventory.
- Range harvest planning, marketing, rate setting, and forest valuation.
- 1.2 Terms used in a pre-harvest inventory are explained.
- Range sample, bounded plot, basal area, stems per hectare (SPH), tally plot, tree parameter, descriptive codes, quality features.
- 1.3 Measurements used in a pre-harvest inventory are described.
- Range stems per hectare, stems per bounded plot, plot area.
- 1.4 Equipment used in a pre-harvest inventory is identified by name and function.

Outcome 2

Establish and measure a sample plot for pre-harvest inventory.

Performance criteria

- 2.1 Maps are interpreted prior to field work for locations, scale distances and bearings in relation to identifiable points on the ground.
- 2.2 Plot is located in the forest from map references and established according to job prescription.
- 2.3 Equipment used to collect data is checked and calibrated to meet job prescription requirements.
- 2.4 Plot is established to determine plot boundaries in accordance.
- Range starting point, distance, slope, compass bearing.
- 2.5 Plot trees are marked for identification.
- Range mark plot centre, trees numbered, readable, facing centre.
- 2.6 Trees are evaluated for height, diameter, descriptive codes and quality features.

Outcome 3

Demonstrate knowledge of and collect data for pre-harvest inventory.

Performance criteria

- 3.1 The hazards and associated risks specific to plotting are identified and controlled.
- Range underfoot, overhead, weather, hindrance, other operations.
- 3.2 Method of collecting inventory data is explained.
- Range software, inventory prescription, edge plot rule, plot movement rule.
- 3.3 Additional requirements of a forest inventory are explained.
- Range wood density sample collection, tree resin assessment, crop and/or cull selection.
- 3.4 Inventory data is collected and recorded from a minimum of three plots in accordance.
- 3.5 Inventory data is audited against client prescription in accordance.
- 3.6 Inventory data is downloaded, backed up, checked and transmitted to the client.
- Range prepare client maps, special notes on conditions encountered.

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	8 November 1996	31 December 2017
Revision	2	19 June 1998	31 December 2017
Review	3	5 December 2000	31 December 2017
Review	4	17 July 2009	31 December 2017
Review	5	10 December 2015	N/A
Review	6	25 June 2020	N/A
Rollover	7	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.