

<b>Title</b>	<b>Carry out forest pre-harvest inventory sampling</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	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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<b>Classification</b>	Forestry > Forest Mensuration
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<b>Available grade</b>	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.

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## 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.

<b>Planned review date</b>	31 December 2024
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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

<b>Consent and Moderation Requirements (CMR) reference</b>	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 Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.