

<b>Title</b>	<b>Demonstrate foundation knowledge of plantation forest establishment and silviculture operations</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to demonstrate knowledge of establishment and silviculture operations in commercial forestry.
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<b>Classification</b>	Forestry > Forestry Knowledge
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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, 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 Definition  
*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
- 4 All activities and performance criteria must meet the requirements of accepted industry practice.

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### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of establishment operations in commercial forestry.

#### Performance criteria

- 1.1 The reasons for establishing a plantation forest are described.

Range log production, soil stabilisation, environmental protection, carbon sink.

- 1.2 Operations involved in establishing a plantation forest are described.
- Range site preparation, planting, releasing, fertilising.
- 1.3 Site preparation methods are described.
- Range chemical, mechanical, manual.
- 1.4 Site preparation is described.
- 1.5 Forest planting is described.
- Range stocking, spacing, soil cultivation, planting depth, positive pull-up.
- 1.6 Factors that affect seedling survival and growth are described.
- 1.7 Planting stock types are described.
- Range seedlings, cuttings, containerised stock.
- 1.8 Releasing methods are described.
- Range chemical, manual.

## Outcome 2

Demonstrate knowledge of silviculture operations in commercial forestry.

### Performance criteria

- 2.1 Terminology used in silviculture is explained.
- Range clearwood, structural timber, whorl, stocking, pruned height, diameter over stubs, epicormics, cull trees, crop trees, final crop, bark damage, thin to waste, production thin, regeneration, canopy, green crown.
- 2.2 Silviculture operations and their effect on tree growth are described.
- Range tree selection, pruning, thinning.
- 2.3 The effect and costs of silviculture operations are explained in terms of their impact on intended end use.
- Range clearwood, structural timber, pulp, carbon sink.
- 2.4 Quality requirements of silviculture operations are described.
- Range pruning, thinning.

<b>Planned review date</b>	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	18 April 2013	31 December 2017
Review	2	10 December 2015	31 December 2024
Review	3	23 July 2020	N/A
Rollover	4	28 March 2024	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 Muka Tangata - People, Food and Fibre Workforce Development Council [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.