

<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.
----------------	--

<b>Classification</b>	Forestry > Forestry Knowledge
-----------------------	-------------------------------

<b>Available grade</b>	Achieved
------------------------	----------

---

### 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.

---

### 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
----------------------------	------------------

**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
--	------

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.