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| <b>Title</b> | <b>Demonstrate knowledge of tools used to collect and manage data in commercial forestry</b> |                |          |
| <b>Level</b> | <b>4</b>   | <b>Credits</b> | <b>4</b> |

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| <b>Purpose</b> | People credited with this unit standard are able to: identify and use measurement tools commonly used in forest data capture operations; describe the way geographic information systems (GIS) are used in commercial forestry; describe stand record systems and their use in commercial forestry; and describe production record systems and their use in commercial forestry. |
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| <b>Classification</b> | Forestry > Forestry Business Management |
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| <b>Available grade</b> | Achieved |
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## Guidance Information

- 1 References  
Colley, M. *Forestry handbook / New Zealand Institute of Forestry Inc.* (4<sup>th</sup> ed). (2005). Christchurch: New Zealand Institute of Forestry Inc.  
McLaren, J.P., *Radiata Pine Growers Manual*. (1993). FRI Bulletin 184. Rotorua, New Zealand: New Zealand Forest Research Institute.
- 2 Examples of electronic data capture tools used in the forest industry include Plotsafe and Fieldman.
- 3 Definition  
*Worksite procedures* refers 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.

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## Outcomes and performance criteria

### Outcome 1

Identify and use measurement tools in forest data capture operations.

### Performance criteria

- 1.1 Measurement tools are identified and used in a forest application in accordance with worksite procedures.

Range       tape, compass, prism, clinometer.

- 1.2 Electronic data capture tools used in forestry are identified and their use is described in accordance with manufacturer's instructions.

Range a minimum of two tools.

- 1.3 An electronic data capture tool is used in a forest application in accordance with manufacturer's instructions and worksite procedures.

## **Outcome 2**

Describe the way geographic information systems (GIS) are used in forestry.

### **Performance criteria**

- 2.1 GIS used in forestry are described in accordance with the reference texts.

Range storage of data, retrieval of information, mapping.

- 2.2 The spatial representation of a GIS is described in accordance with the reference texts.

- 2.3 GIS inputs that are required for effective forest management are described in accordance with the reference texts.

- 2.4 Key outputs of a GIS are described in accordance with the reference texts.

Range maps, information.

## **Outcome 3**

Describe stand record systems and their use in forestry.

### **Performance criteria**

- 3.1 A stand record system is described in accordance with the reference texts.

- 3.2 Three uses of information stored in a stand record system are described in accordance with the reference texts.

- 3.3 A stand record system based on given information about a forest stand is developed in accordance with the reference texts.

## **Outcome 4**

Describe production record systems and their use in forestry.

### **Performance criteria**

- 4.1 Uses of data from a production record system are described in accordance with the reference texts.

- 4.2 Methods for capturing data for a production record system are described in accordance with the reference texts.

Range cycle time, piece size, piece count, load estimate.

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| <b>Planned review date</b> | 31 December 2022 |
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#### Status information and last date for assessment for superseded versions

| Process               | Version | Date             | Last Date for Assessment |
|-----------------------|---------|------------------|--------------------------|
| Registration          | 1       | 16 October 2009  | 31 December 2017         |
| Review                | 2       | 10 December 2015 | N/A                      |
| Rollover and Revision | 3       | 28 May 2020      | N/A                      |

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| <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 at Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.