



Australian Government

FWPSIL2004 Collect forest data or samples for assessment and analysis

Release: 1

FWPSIL2004 Collect forest data or samples for assessment and analysis

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to collect and record forest data and samples for assessment and analysis from specified areas.

The unit applies to individuals who are involved in collecting forest data and samples for assessment as part of forestry operations.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Silviculture (SIL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for collecting forest data and samples	1.1 Determine job requirements from work order or instruction, and where required seek clarification from appropriate personnel 1.2 Confirm safety and environmental requirements, including use of personal protective equipment, for the task according to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace procedures 1.3 Identify, assess and take actions to mitigate risks and hazards associated with collecting forest data and samples 1.4 Identify emergency and evacuation procedures to follow in the event of an incident or accident 1.5 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.6 Select tools, equipment, communication devices and materials used in collecting forest data and samples, and check for serviceability according to workplace procedures
2. Collect forest data or samples	2.1 Confirm data or samples to be collected 2.2 Confirm location of sample area on map or plan 2.3 Identify and interpret relationship between sample area and whole area 2.4 Mark boundaries and corners for sample area using appropriate techniques 2.5 Re-mark unclear or obliterated markings according to workplace procedures 2.6 Apply digital technologies in forest data or sample collection as required 2.7 Take and record measurements using appropriate equipment according to workplace and environment protection procedures 2.8 Collect and label samples according to workplace and environment protection procedures
3. Complete records	3.1 Record results of data or sampling collection in a format suitable for assessment and analysis 3.2 Check results of data or sampling collection and rectify omissions and errors 3.3 Submit results of data or sampling collection for assessment and analysis according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Extract information on forest data or sampling collection techniques from print and electronic sources
Writing	Accurately label samples and complete records for data and samples
Oral communication	Ask open and closed probe questions and actively listen to clarify contents of work orders
Numeracy	Perform routine and complex calculations and record numerical data involving number, area, ratio, percentage, volume, length and diameter

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSIL2004 Collect forest data or samples for assessment and analysis	FWPFGM2206 Collect data or samples for assessment	Updated title Reworded Elements and Performance Evidence Updated Performance Criteria Minor updates to Knowledge Evidence Updated Foundation Skills and Assessment Conditions	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPSIL2004 Collect forest data or samples for assessment and analysis

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has:

- completed one forest data or sample collection task as described in a work order that sets out the sampling area, the purpose for data or sample collection, the type of data or samples to be collected and the data or sample collection method.
- the data or sample collected must relate to one or more of the following materials:
 - foliage
 - wood
 - soil
 - seeds
 - pollen
 - weeds
 - insects
- complied with environmental and safety standards, including use of personal protective equipment (PPE)
- recorded the results of the forest data or sample collection in a format suitable for assessment or analysis.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- common purposes for collecting forest data or samples:
 - calculating volume of timber and residue
 - inventory control
 - stock count
 - assisting with trials

- environmental assessment
- conducting pest and disease surveys
- documenting site factors
- cultural heritage
- methods used to identify boundaries and corners and for marking sample areas:
 - pegging
 - placing flags
 - placing balloons
 - spraying
- types of samples commonly collected, and techniques to collect and label:
 - foliage
 - wood
 - soil
 - seeds
 - pollen
 - weeds
 - insects
- typical stock defects and visual characteristics from the effects of:
 - pests
 - diseases
 - nutritional deficiencies
- typical hazards present in forest environments, and methods of minimising risks and moving through the environment safely:
 - slope
 - water
 - rock
 - undergrowth
 - slash
 - depressions and holes
 - falling or fallen branches
- format, content and use of documents used to record forest data and sample collection and methods used to record information for analysis
- purpose, features and safe operation of forest data and sample collection equipment:
 - measuring tape
 - callipers
 - measuring poles
 - paint
 - purpose-specific balloons
 - flags
 - pegs

- mallet
- pruning shears
- sample containers
- digital equipment
- lasers
- Global Positioning System (GPS)
- drones
- workplace procedures specific to collecting data and samples:
 - workplace health and safety, with particular emphasis on use of PPE
 - communication reporting lines
 - recording and reporting data and sample collection.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a forest work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - site for forest data or sample collection
 - tools, equipment and materials for forest data or sample collection
 - PPE suitable for forest data or sample collection
- specifications:
 - work order or instruction with specific instructions for forest data or sample collection
 - workplace health, safety and environmental policies and procedures applicable to forest data or sample collection
 - workplace procedures for forest data or sample collection.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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