



Australian Government

FWPFOM5007 Contribute to and implement a silviculture regime for a plantation

Release: 1

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Modification History

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

Application

This unit of competency describes the skills and knowledge required to select a silviculture regime consistent with plantation management objectives, and contribute to the planning, implementation and monitoring of a silviculture regime for a plantation.

The unit applies to individuals who undertake forester or forestry field officer job roles in the forest industry.

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

Forest Operations Management (FOM)

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. Select silviculture regime consistent with plantation management objectives	1.1 Confirm plantation management objectives 1.2 Access sources of information required for making decisions on the choice of plantation silviculture regime 1.3 Identify silviculture regime to achieve plantation management

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	objectives
2. Plan plantation silviculture operations	2.1 Plan harvesting prescriptions consistent with plantation management objectives 2.2 Plan site establishment and planting prescriptions consistent with plantation management objectives 2.3 Plan spacing and thinning after establishment to manage competition between trees 2.4 Plan tending and pruning prescriptions consistent with plantation management objectives 2.5 Plan for control of perennial and annual weeds to achieve high survival, good growth rates and plantation access 2.6 Plan browsing controls consistent with plantation management objectives 2.7 Prepare guidelines for use of herbicides, pesticides and fertilisers in plantation management 2.8 Plan crop protection measures consistent with plantation management objectives 2.9 Plan surveys for post-harvest monitoring 2.10 Establish schedule for plantation silviculture activities according to workplace procedures 2.11 Calculate cost of plantation silviculture operations according to workplace procedures
3. Coordinate implementation of plantation silviculture operations	3.1 Coordinate implementation of silviculture operations 3.2 Monitor staff and contractor compliance with prescriptions for silviculture operations 3.3 Identify and resolve incidents of non-compliances within scope of responsibility and workplace procedures 3.4 Report on implementation of silviculture operations to appropriate personnel
4. Monitor effectiveness of plantation silviculture operations	4.1 Implement monitoring procedures, including survival assessments, for assessing effectiveness of silviculture operations 4.2 Analyse outcomes of surveys and reports on effectiveness of silviculture operations 4.3 Identify, plan and coordinate implementation of remedial

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	treatments as required 4.4 Document outcomes of silviculture operations and report to appropriate personnel

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	Interpret complex written, technical information in source documents related to silviculture operations
Writing	Design, develop and revise strategic documents appropriate to audience and context
Oral communication	Use active listening and questioning techniques to convey and clarify information
Numeracy	Analyse and compare complex statistical information related to silviculture operations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPFOM5007 Contribute to and implement a silviculture regime for a plantation	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit	Newly created

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 FWPFOM5007 Contribute to and implement a silviculture regime for a plantation

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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 participated in the design, coordination and monitoring of a silviculture regime for one plantation operation.

In performing this activity, the individual has:

- confirmed plantation management objectives and sourced pertinent information to identify the silviculture regime
- prepared prescriptions, established schedules and calculated costs for at least three plantation silviculture operations from the following:
 - site establishment
 - planting
 - spacing and thinning
 - tending and pruning
 - perennial and annual weeds controls
 - browsing controls
 - use of herbicides, pesticides and fertilisers
 - crop protection measures
 - harvesting
 - surveys for post-harvest monitoring
- confirmed contractual requirements for one plantation silviculture operation and monitored and reported on contractor compliance
- monitored effectiveness of one plantation silviculture operation and presented recommendations for future improvements.

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:

- plantation management objectives:
 - social
 - economic
 - environmental
- types and characteristics of plantation silviculture regimes
- purpose of plantation silviculture regime:
 - production of wood and non-wood products
 - water yield
 - providing habitat for wildlife
 - carbon sequestration
- components of plantation silviculture regime:
 - management objectives
 - silviculture operations
 - monitoring and protection
- approaches to planning, implementing and monitoring plantation silviculture operations:
 - harvesting
 - site establishment
 - planting
 - spacing and thinning after establishment
 - pruning
 - stocking standards
 - browsing controls
 - managing pests and disease
 - crop protection measures – fire, wind
 - surveys for post-harvest monitoring
 - survival assessments
 - remedial treatments
- key elements of a prescription for plantation silviculture operations
- techniques for monitoring silviculture operations in plantations
- techniques for the design, implementation and analysis of outcomes of post-harvest surveys.

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 plantation work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - a plantation

- computing hardware and software for planning, implementing and monitoring plantation silviculture operations
- stand data required for plantation silviculture operations
- specifications:
 - workplace policies and procedures regarding plantation silviculture operations.

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

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