

Modification history

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

FWPFGM5XXX	Analyse ecology of commercial native forests and plantations
Application	<p>This unit of competency describes the skills and knowledge required to explain the impact of forestry operations on biodiversity, conduct biodiversity evaluations and monitor biodiversity management and conservation in forestry operations.</p> <p>The unit applies to individuals who undertake forester or forestry field officer job roles in the forest industry.</p> <p>All work must be carried out to comply with workplace procedures according to state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Core

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. Explain the impact of forestry operations on biodiversity	1.1 Identify the structure and composition of native forests and plantations 1.2 Explain the ecological processes in native forests and plantations that contribute to biodiversity 1.3 Explain the ecosystem services provided by commercial native forests and plantations 1.4 Identify flora and fauna species of high conservation significance and their habitats and the ways these are managed in commercial native forests and plantations 1.5 Assess the impact of forest management activities on biodiversity
2. Outline the regulatory framework applying to biodiversity management and conservation in forestry operations	2.1 Identify the international conventions, and relevant national, state and territory legislation, policies and agreements relating to biodiversity management and conservation that are relevant to commercial forestry operations 2.2 Explain how the regulatory framework is addressed in the prescriptions for forest management activities
3. Conduct a biodiversity evaluation	3.1 Select methods for evaluating biodiversity values in operational areas including the use of ground survey techniques, planning tools and databases 3.2 Select procedures for assessing habitat suitability for forest-dependant threatened or priority species in operational areas and the development of appropriate management actions 3.3 Select procedures for identifying and assessing vegetation communities 3.4 Plan and implement a biodiversity evaluation 3.5 Liaise and seek support from senior personnel during planning and implementation of biodiversity evaluation, as required 3.6 Analyse findings of the biodiversity evaluation and suggest ways of improving biodiversity management and conservation 3.7 Report outcomes of biodiversity evaluation and recommendations to appropriate personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Monitor biodiversity management and conservation practices in forestry operations	4.1 Select and implement methods for monitoring biodiversity management and conservation practices in forestry operations 4.2 Gather and assess information on performance at key milestones or established review periods and make suggest ways for improving biodiversity management and conservation measures 4.3 Report on outcomes of monitoring activities and recommendations to appropriate personnel

Foundation Skills	
<i>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.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Interpret complex written, technical information in source documents related to optimise biodiversity conservation and management
Writing	<ul style="list-style-type: none"> Design, develop and revise strategic documents appropriate to audience and context
Oral communication	<ul style="list-style-type: none"> Use active listening and questioning techniques to convey and clarify information
Numeracy	<ul style="list-style-type: none"> Analyse and compare complex statistical information related to biodiversity conservation and management

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FWPFGM5XXX Analyse ecology of commercial native forests and plantations	Not applicable	New unit	Not applicable

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

TITLE	Assessment requirements for FWPFGM5XXX Analyse ecology of commercial native forests and plantations
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:	
<ul style="list-style-type: none"> conducted one biodiversity evaluation in either a native forest or plantation monitored biodiversity management and conservation practices in one forestry operation in either a native forest or plantation. 	

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:	
<ul style="list-style-type: none"> structure and composition of native forests and plantations ecological processes <ul style="list-style-type: none"> succession disturbance predation competition climatic hydrological nutrient cycles element cycling such as carbon sequestration flora and fauna species of high conservation significance <ul style="list-style-type: none"> types habitat conservation and management strategies ecosystem services provided by commercial native forests and plantations <ul style="list-style-type: none"> Provisioning - water provision, biomass for timber, biomass for firewood, honey, fodder Regulating - water flow regulation, soil retention, carbon sequestration and storage, pollination, habitat for species, air filtration, pest and disease control Cultural - recreation and tourism, social and community connection, cultural heritage connection, amenity, education and research impact of forest management activities on biodiversity <ul style="list-style-type: none"> establishment harvesting regeneration road and track construction silvicultural practices haulage international conventions and national, state and territory legislation, policies and agreements relating to biodiversity management and conservation biodiversity evaluation <ul style="list-style-type: none"> methods for evaluating biodiversity values ground survey techniques planning tools and databases procedures to assess habitat suitability for forest-dependant threatened or priority species procedures for identifying and assessing vegetation communities procedures for planning and implementing a biodiversity evaluation procedures for monitoring biodiversity management and conservation practices in forestry operations. 	

Assessment Conditions	
Assessment of the skills in this unit of competency must take place under the following conditions:	
<ul style="list-style-type: none"> physical conditions: 	

Assessment Conditions	
<ul style="list-style-type: none"> skills must be demonstrated in a forest work environment or an environment that accurately represents workplace conditions resources, equipment and materials: <ul style="list-style-type: none"> a native forest or plantation stand computing hardware and software for preparing reports and analysing data related to biodiversity conservation and management stand data related to biodiversity conservation and management specifications: <ul style="list-style-type: none"> workplace policy and procedures related to conduct of biodiversity evaluations access to workplace policies and procedures which cover current Environment Protection Acts, regulations and related industry standards and codes of practice applicable to forestry operations. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	<p>Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47</p>