



Australian Government

AHCBAC411 Manage pastures for livestock production

Release: 1

AHCBAC411 Manage pastures for livestock production

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to develop and implement a pasture management program for livestock production. It includes assessing the suitability of land for pasture and grazing.

The unit applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

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

Pre-requisite Unit

Nil

Unit Sector

Broad Acre Cropping (BAC)

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. Assess pasture and property for livestock production	1.1 Assess pasture types on property and seasonal production potential and limitations 1.2 Confirm or modify livestock production and workplace objectives to develop production targets achievable for pasture type 1.3 Assess grazing and rest period requirements of pasture type 1.4 Assess nutrient and soil biological requirements for pastures 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>
	determine fertiliser and amelioration program
2. Develop a pasture management program	2.1 Determine objectives and milestones for pasture production and in doing so, consider the role of technology in improving efficiencies 2.2 Determine water demand and availability for each soil type and pasture species 2.3 Identify and plan grazing and fodder conservation strategies 2.4 Determine infrastructure and resources required to support grazing management 2.5 Identify and account for budgetary constraints according to financial plan 2.6 Document pasture management program according to workplace procedures
3. Implement pasture management program	3.1 Identify health and safety hazards, assess risk and implement controls according to workplace procedures 3.2 Monitor pasture capacity according to planned use 3.3 Implement strategic grazing for weed control to maintain ground cover and soil condition 3.4 Determine and apply fertiliser and soil amelioration according to fertiliser and amelioration program 3.5 Monitor soil moisture and implement strategies to manage water requirement according to workplace conditions 3.6 Develop and implement procedures to minimise waste, soil degradation and environmental impact
4. Monitor pasture growth and fodder production	4.1 Determine longer term trends in weed, pest and disease incidence and implement changes to control measures 4.2 Monitor soil structure and erosion risk and consider changes to cultural practices, grazing management and drainage and use of technology to mitigate risk 4.3 Check and maintain water resources and drainage systems according to workplace conditions 4.4 Monitor grazing management to ensure sustainable pasture and optimal livestock production levels 4.5 Identify feed availability and manage according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.6 Monitor pasture maturity and conduct seed harvesting according to marketing and production targets
5. Review production level	5.1 Monitor pasture yields and assess against forecast production levels 5.2 Evaluate grazing programs for sustainability of land and pasture resource, and livestock profitability 5.3 Collect and maintain records of production 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	Interpret and analyse plans and strategies and consolidates information into actions for pasture and livestock management
Writing	- Maintain physical and financial records of production to assist in reviewing production targets - Develop procedures for specific audiences using clear and detailed language in order to convey explicit information, requirements and recommendations for livestock and pasture management
Numeracy	- Use formula and numerical information to calculate financial data and interpret basic statistical and analytical data - Apply basic financial modelling skills to identify, analyse and evaluate budgetary information, time durations and resource allocations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA411	AHCBA401	Edited Application for	Equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
Manage pastures for livestock production	Manage pastures for livestock production	clarity Changes to sequencing and editing of Performance Criteria, including splitting Element 1 into 2 for clarity Foundation Skills refined Performance Evidence and Knowledge Evidence clarified and terminology updated Amended structure of Assessment Conditions	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCBA411 Manage pastures for livestock production

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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 on at least one occasion managed a broadacre pasture for livestock production and has:

- determined soil quality and land use capability
- determined fertiliser, ameliorants and biological inputs required to support production using the following:
 - pasture type
 - soil analysis
 - production targets
- set objectives and milestones for pasture production
- calculated costs of production
- determined pasture water requirements using each of the following:
 - pasture species demand
 - local rainfall
 - water reserves and availability
 - evapo-transpiration data
 - irrigation potential
- assessed grazing and rest periods for pasture types after assessing:
 - pasture quality
 - quantity
 - coverage and persistence
- monitored the productivity and feed intake of grazing livestock
- developed grazing strategies and planned infrastructure required
- assessed the impact of grazing on pasture productivity and resilience
- identified pasture species and estimated dry matter production of pasture
- assessed options to control weed infestation

- identified strategies for pest and disease control
- established production targets for each pasture type on property
- developed a pasture management program according to production targets and workplace objectives
- implemented grazing program to reduce or eradicate areas of weed infestation
- monitored soil health and grazing management to ensure sustainable pasture and optimal livestock production levels
- monitored pasture yields and evaluated against forecast production levels
- considered how technology can be used to improve efficiency
- maintained records for analysis of pasture and livestock production, including:
 - physical
 - financial
- implemented workplace health, safety, and environmental policies and procedures.

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:

- livestock production systems and property requirements
- land and soil conditions and assessment
- pasture species and their growing requirements, including water
- pasture grazing strategies
- basic budgeting and the cost of production, including:
 - basic financial analysis
 - estimating costs
 - importance of financial records
- soil nutrient and fertility, including:
 - interpretation of soil analysis reports
 - pasture nutrient requirements
 - impact of soil biological processes
- environmental management strategies in land use and the impact of practices, including:
 - soil moisture and erosion control
 - chemical and waste contamination
 - weed and pasture impact on adjoining properties
- weed control strategies, including:
 - infestation patterns for different types of weed
 - grazing methods used to control species
 - impact of weeds on productivity and livestock health
 - integrated pest and weed management techniques
- principles of precision agriculture and the role of technology in improving efficiencies, including:

- self-drive, auto steer, global navigation satellite systems (GNSS) and laser technologies
- digital and remote sensors
- remote piloted systems
- controlled traffic farming (CTF) principles and impacts
- variable rate technology (VRT)
- water management for pastures, including:
 - drainage systems and maintenance
 - soil moisture retention strategies
 - irrigation systems for broadacre farms and pastures
- workplace health and safety, legislative requirements and workplace policies and procedures, including:
 - safe handling
 - chemical and hazardous substances
 - fire safety
 - personal protection
 - working near power lines with elevated equipment
- codes of practice, legislation and regulations relating to farm production, including:
 - environmental
 - animal welfare and ethics
 - health and safety.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated on broadacre farm with land suitable for pasture and livestock production or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - livestock
 - tools, equipment or technology
 - chemicals and consumables for fertilising and treating pasture
- specifications:
 - workplace policies, procedures and processes
 - manufacturer operating instructions for tools and equipment
 - access to safety data sheets, workplace production plans, specifications and financial budgets
 - legislation and codes of practice relevant to livestock production.

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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