



Australian Government

AHCBAC515 Manage forage conservation

Release: 1

AHCBC515 Manage forage conservation

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 plan, prepare and administer a crop for forage conservation, including, resourcing, budgeting and overseeing its implementation.

The unit applies to individuals who demonstrate deep knowledge in a specific technical area, take personal responsibility and exercise autonomy in undertaking complex work. They organise the work of self and others and analyse, design and communicate solutions to sometimes complex problems.

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. Plan for forage conservation	1.1 Determine end use requirements of forage conservation in farm production system 1.2 Determine forage conservation options and cost benefit 1.3 Select location for forage crop according to variety and target growth stage 1.4 Determine machinery and equipment required for forage crop

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	production 1.5 Determine supporting technology required to enable efficient performance of operations 1.6 Plan and prepare storage facilities or system for selected forage conservation method 1.7 Identify potential environmental impact of forage conservation activities and develop controls to mitigate damage 1.8 Determine cost of production and prepare working budget 1.9 Determine contractor support and negotiate contracts according to production system requirements and budget constraints 1.10 Identify workplace health and safety hazards, assess risks and develop control strategies
2. Prepare paddocks for forage conservation	2.1 Determine crop cultural management requirements for crop 2.2 Identify optimum time for harvest of key species 2.3 Monitor and control weeds, pests and diseases 2.4 Coordinate safe access to paddocks for harvesting and transport machinery
3. Oversee forage harvesting operations	3.1 Establish dry matter targets for selected method of forage conservation 3.2 Monitor seasonal and current weather conditions to determine optimum time for harvest to ensure quality 3.3 Assess condition and dry matter content of crop during harvesting operation 3.4 Select harvesting and conditioning machinery based on weather conditions and forage drying targets 3.5 Communicate work activities and performance targets to work team and contractors 3.6 Check harvesting activities are conducted in a safe, controlled and efficient manner 3.7 Verify forage storage system is implemented according to storage plan 3.8 Confirm health, safety and quality of forage requirements are implemented 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. Complete operation	4.1 Maintain records according to quality assurance requirements and industry practice 4.2 Check waste is disposed of to minimise environmental impact according to environmental policies 4.3 Verify machinery and ancillary equipment is cleaned and serviced according to manufacturer instructions and biosecurity procedures 4.4 Conduct quality checks of stored forage 4.5 Monitor and minimise environmental impact of forage conservation activities

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	Identify and extract information for planning forage conservation from complex texts, reports, maps and plans including legislation and regulations, policies and procedures to formulate organisational strategies
Oral Communication	Express complex information in a simple, clean and effective manner when negotiating contracts and informing work teams and contractors of work requirements and performance targets
Numeracy	Use highly-developed numeracy skills to interpret complex financial information and perform calculations to translate estimates of operational costs and scheduling for inclusion in forage crop management plan and budget

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA515	AHCBA502	Edited Application for	Equivalent

Code and title current version	Code and title previous version	Comments	Equivalence status
Manage forage conservation	Manage forage conservation	clarity Change to sequencing and editing of Performance Criteria for clarity Foundation Skills refined Performance Evidence and Knowledge Evidence clarified 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 AHCBC515 Manage forage conservation

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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, planned, prepared and administered a full cycle of forage crop for conservation and has:

- assessed and selected a forage conservation system for farm
- developed a cost benefit analysis for forage conservation options
- identified resource requirements and produced a budget including:
 - crop inputs
 - harvest area
 - machinery and contractors
 - labour
 - storage type and sites
- determined cultural requirements and timing of crop, including:
 - crop species/variety
 - fertilisers and amelioration
 - irrigation
 - pest and weed control
 - grazing regimen
- planned and monitored harvesting operations
- conducted quality checks of stored forage
- selected forage conservation machinery and technologies for efficient forage crop harvesting
- managed harvest operations, forage preparation and storage of forage according to plan
- communicated work activities and performance targets to work team and contractors
- ensured waste is disposed ethically to reduce environmental impact
- maintained records of operations
- monitored the implementation of workplace health, safety, biosecurity and environmental policies.

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:

- forage conservation options and cost benefit analysis
- silage and hay conservation systems, including:
 - baling
 - wrapping
 - compacting
 - sealing
 - final storage
- factors affecting the quality of silage and hay
- dry matter content, quality, hygiene and biosecurity requirements
- range and functions of silage and haymaking machinery and equipment and the technologies that support efficiencies, including:
 - self-drive, auto steer, global navigation satellite systems (GNSS) and laser technologies
 - controlled traffic farming (CTF) principles and impact
 - variable rate technology (VRT)
 - remote piloted systems
 - digital and remote sensing and monitoring
- weeds, pests and diseases associated with crops and pastures, including:
 - infestation patterns and methods of control
 - cultural and mechanical controls
 - integrated pest management strategies
- types and application of personal protective equipment
- work health and safety legislation and regulations, including:
 - licensing requirements in relation to forage operations
 - chemical and hazardous substances
 - fire safety and management
 - personal protection
 - working at heights and confined spaces with storage bins
 - power lines and elevated equipment safety
 - forage handling, loading, transported and storage
- risk factors affecting production and harvesting, including:
 - human and animal health
 - weather and impact on crop quality and harvesting
 - environmental including, nutrient levels at field out areas and effluent run-off
 - irrigation, soil moisture and erosion
- workplace and industry biosecurity and environmental policies and practices.

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 a broadacre farm suitable for forage conservation crop production or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - forage conservation crop
 - chemicals and consumables for fertilising and treating crops
 - computer or analogue financial models and formats
- specifications:
 - workplace policies, procedures and processes
 - safety data sheets
 - legislation and codes of practice relevant to forage conservation crop production.
- relationships:
 - work team and contractors.

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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