



Australian Government

AHCLSK503 Develop and implement a breeding strategy

Release: 2

AHCLSK503 Develop and implement a breeding strategy

Modification History

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 2.0.
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to assess breeding requirements, select livestock for breeding, and monitor and evaluate the breeding program.

The unit applies to managers of livestock properties who are responsible for breeding programs and use of resources appropriate to meet property breeding aims. They take responsibility and exercise autonomy in undertaking complex work analysing, designing and communicating solutions to sometimes complex problems.

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

Work health and safety and animal welfare legislation relevant to interacting with horses applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users are advised to check with the relevant authority for specific requirements.

Pre-requisite Unit

Nil

Unit Sector

Livestock (LSK)

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>

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1. Plan breeding program	1.1 Assess and clarify breeding requirements to meet property or organisational aims 1.2 Identify and arrange resources to support breeding requirements 1.3 Select breeding options to optimise results and consistency 1.4 Undertake economic assessments to establish the feasibility of the breeding objectives 1.5 Formulate breeding program to meet organisation objectives, and ensure sufficient flexibility to accommodate contingencies
2. Select livestock for breeding	2.1 Determine selection criteria for the visual and objective methods of selecting livestock based on heritability and economic returns for the property 2.2 Establish culling and replacement practices to maintain or improve appropriate herd size, animal ratios and grade of livestock 2.3 Assess genetic gain potential to determine and justify herd or flock structure 2.4 Source genetic material to optimise genetic gain within the herd or flock from suitable sources 2.5 Check and monitor selected livestock to ensure condition and welfare status meets breeding program requirements 2.6 Carry out measurements of production and genetic characteristics, and evaluate results within appropriate breeding program requirements
3. Monitor breeding program	3.1 Supervise implementation of the breeding program for efficiency and effectiveness 3.2 Prioritise and implement changes necessary to achieve breeding aims according to breeding program requirements 3.3 Examine and control allocated resources within organisation budgetary constraints 3.4 Maintain safe workplace and environmentally responsible practices in line with industry and organisation work health and safety and environment sustainability requirements 3.5 Observe and comply with relevant legislative requirements associated with livestock production, such as animal welfare and biosecurity requirements

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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>
4. Evaluate breeding program	4.1 Review breeding program processes and outcomes against organisation objectives 4.2 Assess performance of facilities, resources and equipment for effectiveness and efficiency 4.3 Assess effectiveness of selection criteria for contribution to achievement of breeding aims and organisation profitability 4.4 Document relevant information for continual assessment to inform future practice

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	Critically analyse documentation from a variety of sources to identify specific criteria, and consolidate information to determine requirements for breeding program and livestock production
Writing	Consolidate and logically structure relevant information to produce clear and concise documentation relevant to purpose and audience
Numeracy	Use mathematical concepts to calculate, compare and estimate numerical and financial data required for planning and forecasting livestock production and breeding activities
Navigate the world of work	Take responsibility to ensure organisational policies, procedures and regulatory requirements relevant to livestock breeding program are being met
Interact with others	Select and uses appropriate conventions and protocols when communicating with others in a range of work contexts
Get the work done	Monitor progress of plans and schedules, and review and change to meet new demands and priorities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCLSK503 Develop and implement a breeding strategy Release 2	AHCLSK503 Develop and implement a breeding strategy Release 1	Minor changes to clarify intent of element 1 Safety requirements and foundation skills descriptions added	Equivalent unit

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 AHCLSK503 Develop and implement a breeding strategy

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Performance Evidence

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

There must be evidence that the individual has developed and implemented a minimum of one breeding strategy for an operation or property, including:

- identifying genetic information for existing and potential livestock through breed data
- using industry programs to benchmark and identify sources of genetic material
- developing a breeding objective
- implementing selection strategies for livestock
- implementing animal welfare strategies to handle livestock safely and humanely
- monitoring progress in a breeding program and undertaking reviews
- evaluating breeding program
- documenting and reviewing data derived from the breeding strategy
- maintaining a safe and hazard-free workplace environment
- monitoring and minimising impacts to the environment.

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:

- difference between genotype and phenotype, the heritability of genetic traits and the basic genetic theory related to genetic correlation of traits
- relevance of generation interval in relation to commercial improvement
- relevance of estimated breeding values in the development of a multi-trait selection strategy
- economic impact of production characteristics

- features of and measurement of production and genetic characteristics used in breeding programs
- relevant work health and safety and biosecurity requirements, and animal welfare and environment sustainability practices
- key requirements of regulations and codes of practice relevant to developing and implementing a breeding strategy, including:
 - work health and safety
 - animal welfare
 - biosecurity
 - sustainability practices.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- specifications:
 - work instructions and workplace procedures relevant to developing and implementing a breeding strategy
 - organisational documentation relating to breeding information and financial arrangements required to develop a breeding strategy.

Training and assessment strategies must show evidence of the use of guidance provided in the *Companion Volume: User Guide: Safety in Equine Training*.

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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