



Australian Government

Department of Education, Employment and Workplace Relations

ACMCAN306A Monitor animal reproduction

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the process of facilitating and monitoring reproduction needs in accordance with the institution's breeding plan. Animals in the reproduction program may be either naturally or artificially reared. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	The unit is applicable to wildlife animal keepers or carers who are expected to perform tasks under supervision. In addition to legal and ethical responsibilities, all units of competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Facilitate reproduction	1.1. Reproduction is facilitated in accordance with the institution's breeding plan. 1.2. Sexual behaviour, communication and signs in the male and female reproductive cycle are recognised and reported for the major animal groups. 1.3. Risks associated with potential aggressive animal behaviour are identified and monitored in accordance with occupational health and safety (OHS) and animal welfare requirements. 1.4. Conditions and environmental cues conducive to breeding are provided in accordance with species-specific requirements.
2. Monitor breeding animals during the period of reproduction	2.1. A suitable environment for breeding animals is provided in accordance with species-specific requirements and OHS requirements. 2.2. Requirements of breeding animals are provided and monitored in accordance with institutional policies and procedures. 2.3. Relevant data is recorded so that successes can be replicated. 2.4. Changes to husbandry regimes are communicated to the team in accordance with institutional policies and procedures.
3. Prepare and assist with birth or hatching	3.1. Suitable media are provided to assist with the birth or hatching. 3.2. Appropriate monitoring is provided to ensure the safe birth or hatching of young animals. 3.3. Post-birth or post-hatching behavioural considerations are assessed and managed. 3.4. Breeding outcomes are assessed and updates are recommended for inclusion in the institution's breeding plan.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- complete animal husbandry tasks, including nutritional, health and behavioural requirements
- complete relevant documentation and reports
- employ safe, humane and environmentally responsible systems and procedures when handling and working with animals
- follow quarantine and disease control procedures
- implement institutional policies and procedures
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- monitor animal health and behaviour for indicators of injury, compromised health or distress
- prepare and maintain breeding, birthing and hatching environments and other requirements
- recognise courtship, copulation, combat and signs of behavioural and physical changes associated with reproduction
- literacy skills to read and implement institutional policies and procedures, including OHS and waste management; follow breeding plan recommendations; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- communication skills/language to fulfil the job role as specified by the institution, including questioning techniques, active listening, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to estimate, calculate and record routine workplace measures
- interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds
- problem-solving skills to use available resources and prioritise daily tasks
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

Required knowledge

- anatomical structures and physiological features for the animal groups associated with reproduction
- animal husbandry requirements related to breeding animals
- behavioural changes in animals when pregnant, with young or when displaying territorial behaviour
- emergency procedures
- environmental processes that may influence breeding, birth and hatching

REQUIRED SKILLS AND KNOWLEDGE

- factors that may interfere with breeding
- housing requirements for mother and young, where relevant
- institution collection and breeding plans
- natural breeding behaviours and biology
- normal and abnormal animal behaviour
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant legislation, including state or territory Acts and codes of practice
- reproductive terminology
- seasonality and non-seasonality of reproduction.

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can: • provide environments conducive to reproduction in accordance with institution's breeding plan • monitor reproductive processes in captive animals from the time prior to fertilisation through to birth or hatching of the young • monitor and manage birth or hatching processes • record and maintain accurate records. The skills and knowledge required to monitor animal reproduction must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
Context of and specific resources for assessment	Assessment of this unit is to be practical in nature and will be most appropriately assessed in a captive animal workplace. There must be access in this situation to breeding pairs and/or groups of animals for a range of species as well as the appropriate equipment and/or resources to enable one to demonstrate competence.
Method of assessment	To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and where possible, over a number of assessment activities. The assessment strategy must include practical skills assessment. Suggested strategies for this unit are:

EVIDENCE GUIDE	
	• written and/or oral assessment of candidate's required knowledge • observed, documented and first-hand testimonial evidence of candidate's application of practical tasks • simulation exercises that reproduce normal work conditions • third-party evidence • workplace documentation • portfolio. This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.
Guidance information for assessment	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Breeding plan may include:	- information about: - species management: - number of breeders required - selection criteria for breeders and retiring breeders - stock replacement - mating system to be used - enhanced reproductive methods - reproductive control methods - identification and records systems to be used - data to be collected about production rates (e.g. numbers born and sex ratios) - weaning methods.
Types of sexual behaviour that may be observed includes:	- aggression between males - courtship rituals - copulation - nesting - preening.
Communication and signs in the male and female reproductive cycle may include:	- communication: - olfactory signals - specific breeding calls - signs: - changes in dietary habits - fattening up - metamorphosis in amphibians - oestrus - parturition - puberty.
Major animal groups are:	- amphibians - birds

RANGE STATEMENT	
	• fish • invertebrates • mammals • reptiles.
OHS risks when working with animals may include:	• animal bites, envenomation, kicks, scratches and crush injuries • biological hazardous waste and sharps disposal • handling of chemicals and medicines • gas leakage • inhalation of aerosol particles • intraocular contamination • manual handling, including carrying, lifting and shifting • needle pricks and cuts from other sharps • release of infective agents (animal and human) • slippery or uneven work surfaces • zoonoses.
Conditions suitable for breeding may include:	• dietary requirements • photoperiod • privacy • reduced noise or light • screening • simulated natural habitat • temperature and humidity.
Environmental cues that may be required include:	• changes in photoperiod • humidity • temperature and/or precipitation.
Suitable environment may include:	• consideration of appropriate housing for the mother • providing suitable media for fertilisation • screening or privacy from the public • separation of the animal from other animals • simulated natural habitats.
Requirements may include:	• behaviour requirements (e.g. physical, social and food-related enrichment) • health requirements (e.g. specific medication and regular health checks) • nutritional requirements (e.g. food supplements during egg development, pregnancy and lactation).

RANGE STATEMENT	
Data may include:	• environmental conditions • the introduction or separation of individuals.
Suitable media	• materials or substrates for nest building, egg laying and/or incubation.
Monitoring may include:	• implementation of a 24-hour watch and checking egg viability.
Behaviour considerations may include:	• post-birth and egg laying behavioural considerations: • the need to remove one or both parents • maintenance of a private and/or quiet environment • maintenance of the animal within a social group.

suitable media

Unit Sector(s)

Unit sector	Captive animals
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		