



Australian Government

Department of Education, Employment and Workplace Relations

ACMCAN406A Assist in establishing and maintaining a plantation

Revision Number: 1

ACMCAN406A Assist in establishing and maintaining a plantation

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the process of assisting other personnel, such as horticulturists, in establishing and maintaining a plantation for animal feed requirements. 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 senior or more experienced keepers with extensive zoo keeping or related experience. 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		

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. Assist with establishing and maintaining a zoological plantation	1.1. Zoological plantation requirements are identified and sourced in consultation with relevant personnel. 1.2. Assistance is provided in establishing a plantation. 1.3. Plantation management strategies are implemented in accordance with occupational health and safety (OHS) and institutional policies and procedures. 1.4. Daily plantation activities are conducted under supervision.
2. Calculate and harvest animal food requirements	2.1. Animal food requirements are calculated to ensure a constant food supply. 2.2. Plantation is harvested in accordance with sustainable horticultural practices. 2.3. Advice is provided to relevant personnel in respect to maintaining the plantation to meet animal requirements. 2.4. Plantation records are maintained and stored in accordance with institutional policies and procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- calculate and evaluate dietary needs for a range of animals
- employ safe, humane and environmentally responsible organisational systems and procedures when handling and working with animals
- implement institutional policies and procedures
- maintain records and write workplace documents, including reports to management
- provide advice on animal food requirements
- research plantation requirements for specific animals
- literacy skills to read and follow institutional policies and procedures, including OHS and waste management; implement dietary instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- oral communication skills/language to communicate effectively with team members, supervisors, contractors and consultants and to fulfil job role as specified by the institution, including questioning techniques, active listening, training others, asking for clarification from supervisors and consulting with supervisors
- numeracy skills to complete arithmetic calculations and weigh and measure feed
- interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- problem-solving skills to use available resources and prioritise daily tasks.

Required knowledge

- animal care and management strategies
- basic anatomy and physiology relating to nutrition and digestive processes for specific animal species
- animal groups and their natural diets
- animal husbandry manuals and other recordkeeping requirements
- animal nutrition requirements
- basic physiology of required plant species
- pest identification and management techniques
- principles of animal welfare and ethics
- OHS and animal welfare legislative requirements and codes of practice
- objectives of a plantation program
- relevant institutional policies and procedures, including OHS, animal welfare, ethics, hygiene standards and other industry guidelines
- relevant federal and state or territory legislation and codes of practice
- safe work practices

REQUIRED SKILLS AND KNOWLEDGE

- toxic plants and substances, including control factors affecting toxicity and protocols for suspected animal poisoning
- zoological horticulture principles and practices.

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:

- work with others, including horticulturists, to establish and maintain a plantation in accordance with OHS and organisation requirements
- correctly calculate and harvest food requirements
- maintain plantation records.

The skills and knowledge required to assist in establishing and maintaining a plantation 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. Workplaces may include small or large captive animal facilities, traditional or open-range type facilities and mobile or theme park environments.

There must be access to 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 (e.g. plantation records) • 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.

<i>Zoological plantation requirements</i> may include:	• animal needs • considerations of location and size • environmental considerations • equipment and materials • plant types • planting a mix of evergreen and deciduous for year round supply • use of plant simulators.
Plantation requirements may be <i>sourced</i> from:	• donations • local councils • other plantations within the captive animal facility • outside contractors for plants and equipment • own plant stock • roadside verges.
<i>Relevant personnel</i> may include:	• consultants • horticulturalists • keepers in charge • landscapers • project managers.
<i>Plantation management strategies</i> may include:	• environmentally friendly and non-poisonous pest management • environmentally friendly waste management • water conservation techniques.
<i>OHS</i> risks associated with the plantation may include:	• biological hazardous waste and sharps disposal • handling of chemicals and fertilisers • inhalation of aerosol particles • manual handling, including carrying, lifting and shifting • moving parts of machinery or equipment • noise including machinery • repetitive strain injury (e.g. secateurs usage) • slippery or uneven work surfaces.

RANGE STATEMENT	
Daily plantation activities may include:	• canopy reduction • controlling pests • fertilising • mulching • pruning • removing waste • replanting • thinning • watering • weeding.
Sustainable horticulture practices may include:	• plantation practices that consider the needs of: • environment • equipment and materials • plant types • planting a mix of evergreen and deciduous plants for year round supply • specific animals • use of plant stimulators • safe and effective pest control and waste management strategies.
Advice may relate to:	• animal preferences • mixed age structure • plants known to be toxic to animals • plant variety.

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		