



Australian Government

ACMGEN307 Maintain aquariums and/or aquascapes and aquatic animals

Release: 1

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Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 4.0.

Application

This unit of competency describes the skills and knowledge required to monitor water quality in aquariums and/or aquascapes, and monitor the health and behaviour of aquatic animals. Aquatic animals may include fish, aquatic invertebrates (including crustaceans and corals), amphibians and turtles.

This unit applies to individuals working in the animal industry sector who maintain aquariums and/or aquascapes and aquatic animals. They work independently and take responsibility for the quality of their own work, including carrying out assigned tasks, organising processes, selecting products and techniques, solving routine problems and working to required timeframes.

All work must be carried out to comply with workplace procedures according to Commonwealth and state/territory health and safety and animal welfare regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

General Animal Care (GEN)

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. Follow effective personal health management practices	1.1 Maintain personal hygiene and cleanliness according to workplace health and safety policies and procedures 1.2 Identify disease agents and their impact on aquatic animals 1.3 Implement work practices to protect self and minimise risk of zoonotic diseases
2. Monitor the health and wellbeing of aquatic animals	2.1 Identify signs of unhealthy aquatic animals, and record information according to workplace procedures 2.2 Identify injured aquatic animals, and report to supervisor 2.3 Identify signs of abnormal behaviour and condition in aquatic animals, and report to supervisor 2.4 Maintain records for aquatic animals according to workplace procedures
3. Maintain water quality	3.1 Collect water samples using appropriate equipment and techniques according to workplace procedures 3.2 Test samples and record results using appropriate equipment according to workplace requirements 3.3 Adjust water quality to suit requirements of aquarium or aquascape and aquatic species if required 3.4 Maintain records of water quality for aquarium or aquascape and species according to workplace requirements
4. Administer aquatic animal treatments	4.1 Identify broad categories of parasitic infestations and viral, fungal and bacterial diseases relevant to aquatic animal species 4.2 Administer appropriate and authorised aquatic animal treatments 4.3 Implement preventative medicine programs for internal and external parasites 4.4 Store and handle treatments and medicines according to workplace procedures 4.5 Maintain records for treatments and medicine programs according to workplace procedures and legislative requirements

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 biological information from valid documents about aquatic animal disease and behaviour - Interpret accurately product information and instructions on animal products and animal care equipment
Numeracy	- Calculate volume, weight, area, percentage, ratio, time and application rates - Use tables, graphs or other techniques to document trends and changes in sampling data over time

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ACMGEN307 Maintain aquariums and/or aquascapes and aquatic animals	ACMCAS305 Maintain aquascapes and aquatic animals	Title changed Changes to elements and performance criteria for clarity Assessment requirements updated	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103>

Assessment Requirements for ACMGEN307 Maintain aquariums and/or aquascapes and aquatic animals

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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:

- maintained at least three different aquariums or aquascapes and ensured optimal health of those animals – each tank or pond must house a different species of aquatic animals than the other tanks or ponds
- collected and tested at least two water samples and adjusted water quality to suit the aquariums or aquascape and species requirements
- administered appropriate and authorised aquatic animal treatments on at least one occasion
- maintained records and required documentation for treatments and medicine programs for each aquarium or aquascape.

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:

- types of aquatic animals, including:
 - fish
 - aquatic invertebrates (including crustaceans and corals)
 - amphibians
 - turtles
- principles and practices of aquariums and/or aquascapes and aquatic animal maintenance
- basic aquatic animal biology
- aquatic animal health, including:
 - signs of normal and abnormal behaviour of relevant aquatic species reflecting health conditions

- signs of common aquatic animal diseases and parasitic infestations and their transmission between aquatic animals
- broad categories of parasitic infestations and viral, fungal and bacterial diseases
- preventative medicine programs for internal and external parasites
- appropriate and authorised aquatic animal treatments
- types of and transmission of zoonotic diseases
- water quality, including:
 - basic water chemistry
 - ideal water conditions and quality for a range of aquatic animals, including pH, nitrate, nitrite, ammonia, salinity, calcium and/or hardness
 - water sampling, testing and analysis procedures and techniques
 - water quality adjustment procedures
 - chemicals used to correct water conditions and the water quality of aquariums or aquascapes
- key features of Commonwealth and relevant state/territory legislation, licensing and codes of practice related to aquatic animal species, biosecurity, health and safety, and animal welfare.

Assessment Conditions

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

- physical conditions:
 - an aquatic animal workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - live aquatic animals specified in the performance evidence
 - materials and equipment to create and maintain aquascapes specified in the performance evidence
 - aquarium or aquascape water quality testing and treatment equipment and materials
 - aquatic animal treatment resources.

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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