



Australian Government

AHCMAR304 Identify and collect marine life

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to identify, collect, preserve and store small, macroscopic, marine life that is commonly encountered when undertaking marine monitoring activities, including marine macro-algae, invertebrates and fish.

The unit applies to individuals who work in a marine conservation and management role under broad supervision and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.

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

Pre-requisite Unit

Nil

Unit Sector

Marine (MAR)

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. Prepare to identify and collect marine life	1.1 Select resources required for identifying collected marine life 1.2 Identify and select equipment and materials required for collection, transport, preservation and storage of marine life 1.3 Identify sources of expertise and advice 1.4 Determine location/s and timing for collection and identification

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Identify and comply with licences and permits required for collecting marine wildlife 1.6 Follow workplace procedure for identification, collection and storage of marine specimens 1.7 Identify health, safety and environmental hazards, assess the risks and implement controls according to workplace procedures
2. Identify, gather and preserve marine specimens	2.1 Identify marine plants and animals using industry approved identification resources 2.2 Record characteristics and identity of marine life according to workplace procedures 2.3 Collect specimens for preservation, minimising environmental impact according to workplace procedures and ethical animal welfare practices 2.4 Implement biosecurity procedures 2.5 Transport small, neritic marine specimens according to workplace and ethical procedures 2.6 Preserve small, neritic marine specimens according to workplace preservation procedures 2.7 Confirm identification with supervisor or other expert
3. Complete identification, store specimens and update records	3.1 Update marine species records 3.2 Store marine specimens for the short and/ or medium term, according to workplace procedures 3.3 Clean and maintain equipment used for collection, transport, preservation and storage 3.4 Dispose of waste materials according to workplace and environmental procedures

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
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Skill	Description
Reading	Interpret instructions, licences and permits, and consolidate information to ensure understanding and compliance for marine activities
Writing	Record and update data accurately according to protocols for data collection

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCMAR304 Identify and collect marine life	Not applicable	The unit has been created to address an emerging skill or task required by industry	Newly created

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 AHC MAR304 Identify and collect marine life

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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 collected, prepared, preserved and stored 10 marine life specimens, with representative samples from at least two of the following groups:

- marine algae
- marine invertebrates

There must be evidence that the individual has:

- fish identified and selected resources, equipment and materials required for identification, collection and storage of marine life
- identified sources of expertise and advice and followed workplace procedure for identification, collection and storage of marine specimens
- identified marine plants and animals using expertise, advice and workplace-provided resources
- used techniques for collecting and transporting marine life to minimise impact on the marine environment and specimens
- complied with animal ethical standards and biosecurity procedures
- handled preservation equipment and materials according to safety procedures
- applied preservation and storage techniques for small marine specimens according to workplace procedures
- cleaned, maintained and stored equipment and disposed of waste materials according to workplace procedures.
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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:

- marine zonation and terminology, including:
 - supratidal, intertidal and subtidal

- photic and aphotic
- littoral, benthic, neritic and pelagic
- major marine substrate types, including:
 - mud
 - sand
 - rock
 - coral
 - rubble
- identification resources for marine algae, invertebrates and fish, including computer software
- operational parameters of intertidal areas that affect monitoring work, including:
 - tidal cycles and other inundation effects
 - seasonal variation
 - intertidal wildlife behaviour and life cycle
 - dangerous marine animals in the intertidal zone
- equipment and materials required for collection and short-term to medium-term storage of small marine specimens
- simple techniques and processes for collection and short-term to medium-term storage of small marine specimens, including drying, freezing and ethanol
- minimal impact collection techniques for marine specimens
- ethical and animal welfare practices for collection of marine specimens
- biosecurity measures for collection and transport of marine specimens and collection/transport equipment
- permits and permissions required for collection for short-term to medium-term storage of small marine algae, invertebrates and fish
- sources of expertise and advice for identification of marine life
- workplace procedure for identification, collection and storage of marine specimens, and workplace biosecurity procedure
- workplace procedure and environmental procedures for disposal of waste materials
- workplace health and safety processes and procedures while collecting marine life.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated in the field for the marine species specified in the Performance Evidence
- resources, equipment and materials:
 - live marine life in situ
 - tools and equipment for collecting specimens
 - equipment and materials for preparing, preserving and storing marine specimens

- specific items of personal protective equipment required for safe collection
- specifications:
 - specific workplace procedures and processes for ethical collection, preparation and storage of marine specimens
 - manufacturer operating instructions for collection, preserving and storage equipment
 - safety data sheets for materials used in preserving specimens
 - workplace instructions
- relationships:
 - experts
 - supervisor.

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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