



Australian Government

Department of Education, Employment and Workplace Relations

AHCNAR302A Collect and preserve biological samples

Release: 1

AHCNAR302A Collect and preserve biological samples

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of collecting and preserving biological samples as part of a monitoring program and defines required to: establish the equipment and facilities to take biological samples; carry out biological sampling; preserve and record samples and forward for testing if required; record sampling data and observations; report outcomes of collection.
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Application of the Unit

Application of the unit	This unit applies to the process of collecting and preserving biological samples and is likely to be under limited supervision from others with checking only related to overall progress. It requires knowledge of industry biological sampling and preserving guidelines and protocols, flora and fauna, environmental legislation, and sampling and preserving methods.
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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

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Plan for collection	1.1. Sampling schedule is read/heard and confirmed with manager. 1.2. Sampling site location is confirmed and approval obtained for site access following enterprise and legislative guidelines. 1.3. Samples to be collected and preserved are identified by supervisory staff. 1.4. Equipment requirements for biological sampling and preserving are determined and arranged. 1.5. Range of likely operating conditions, hazards and difficult/sensitive environments are assessed for impact on sampling and testing.
2. Prepare equipment and resources	2.1. Equipment required for sampling and preserving is sourced according to sampling procedures. 2.2. Equipment is checked for availability and serviceability in accordance with enterprise procedures. 2.3. Data or record sheets/books are collected for use. 2.4. Equipment, data sheets and personnel are moved to sampling sites without injury or damage and readied for use.
3. Carry out biological sampling and preserving procedures	3.1. Samples are collected in accordance with sampling plan and enterprise procedures and industry protocols/guidelines. 3.2. Samples are preserved and recorded in accordance with sampling standards and guidelines. 3.3. Samples for external analysis are prepared, packaged and sent to laboratory in accordance with sampling schedule and laboratory standards. 3.4. Specific and general observations including information on relevant ambient and antecedent environmental conditions are made in accordance with monitoring schedule. 3.5. Equipment operation and work practices conform to occupational health and safety requirements. 3.6. Collection outcomes including presentation of samples are reported and delivered in accordance to enterprise guidelines.
4. Complete collection of biological sampling activities	4.1. Equipment and clothing is cleaned, sanitised, repaired and stored in accordance with enterprise procedures. 4.2. Damaged or malfunctioning equipment is repaired

ELEMENT	PERFORMANCE CRITERIA
	on site sampling results and observations are accurately recorded on data sheets and forwarded in accordance with enterprise procedures. 4.3.Changes in field conditions and equipment are conveyed to supervisor according to enterprise procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- plan for collection
- prepare equipment and resources
- carry out biological sampling and preserving procedures
- complete collection of biological sampling activities
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- hydrological cycle
- field procedures for biological sampling and preservation
- collecting equipment and methods
- preservation equipment and processes
- basic habitat assessment
- water quality issues.
- fauna and flora recognition relevant to sampling activities
- relevant environmental legislation.

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 competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • establish the sampling purpose and requirements • prepare equipment and facilities to take biological samples • carry out biological sampling • preserve and record samples and forward for testing if required • record sampling data and observations • report outcomes of collection.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Types of samples may include:	• collecting and preserving biological samples of macro invertebrates, aquatic vegetation, intertidal organisms, soil and water • equipment used to collect and preserve biological specimens.

Unit Sector(s)

Unit sector	Natural area restoration
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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