Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCECR302 | Collect and preserve biological samples |
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| Application | This unit of competency describes the skills and knowledge required to identify sampling method, collect and preserve biological samples for later processing and/or analysis.  The unit applies to individuals who work in an environment where biological tests are required, and who work 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 are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Ecological Restoration (ECR) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Plan for collection | 1.1 Confirm the purpose and schedule for sampling with manager  1.2 Identify sampling site location and obtain approval for site access from stakeholders  1.4 Identify samples to be collected and preserved  1.5 Identify and comply with legislative and regulatory requirements governing biological samples and sampling methods  1.6 Organise equipment required for biological sampling and preserving  1.7 Assess range of likely operating conditions, hazards and sensitive environments for impact on sampling and testing  1.8 Identify hazards, assess risk and implement controls according to work health and safety policies and procedures |
| 2. Prepare equipment and resources | 2.1 Obtain equipment required for sampling and preserving  2.2 Check equipment for availability and serviceability  2.3 Clean and sanitise equipment to maintain integrity of samples and biosecurity conditions  2.4 Collect record sheets necessary for task  2.5 Transport resources and personnel safely to sampling sites and prepare for use |
| 3. Carry out biological sampling and preserving procedures | 3.1 Collect samples according to sampling plan  3.2 Apply environmental sustainability and biosecurity practices to collection processes  3.3 Preserve and record samples in accordance with sampling standards and guidelines  3.4 Prepare, package and dispatch samples for external analysis in accordance with sampling schedule and laboratory standards  3.5 Observe and record ambient and antecedent environmental conditions  3.6 Operate equipment and undertake work according to work health and safety requirements  3.7 Report and deliver presentable sample collection according to workplace procedures |
| 4. Complete collection of biological sampling activities | 4.1 Clean, sanitise and store equipment and clothing  4.2 Repair damaged or malfunctioning equipment  4.3 Record site sampling results and observations according to workplace record procures  4.4 Report changes in field conditions and equipment to manager |

| 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. | |
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| Skill | Description |
| Writing | * Accurately complete workplace sampling records and reports using clear language and industry terminology |
| Numeracy | * Use appropriate measurement techniques to ensure accuracy when collecting weights and volumes of biological samples |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCECR302 Collect and preserve biological samples  Release 2 | AHCNAR302 Collect and preserve biological samples  Release 1 | Change to Unit Sector and Code  \Minor changes to Application and Performance Criteria for clarity  Updated Performance Evidence, Knowledge Evidence and Assessment Conditions | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72 |

| TITLE | Assessment requirements for AHCECR302 Collect and preserve biological samples |
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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 and preserved at least 10 biological samples from at least two different monitoring sites.  There must also be evidence that the individual has:   * established the sampling purpose and schedule * planned and arranged the collection with stakeholders * prepared equipment and facilities * carry out biological sampling according to monitoring program and enterprise procedures * preserved and recorded samples and forward for testing according to monitoring program requirements * recorded sampling data and observations * reported outcomes of collection * applied workplace health, safety and biosecurity procedures throughout collection process. | |

| Knowledge Evidence |
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| 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 biological samples that may be included in the plan, including: * water * microorganisms * fungi * micro and macro invertebrates * plants * animals including fish * industry biological sampling and preserving guidelines and protocols * identifying and selecting representative sampling sites * field procedures for collecting and preserving biological samples for different environments and conditions, including: * random sampling * stratified sampling * systematic sampling * collecting equipment and methods for specific environments and biological specimens, including: * marine and aquatic * terrestrial * arboreal * preservation equipment and processes including: * storage containers * labels and labelling information * preserving techniques and materials * recognition of fauna and flora to be sampled * health and safety considerations when sampling, including: * weather conditions and impact on site safety * personal protective equipment * toxicological and other personal health risks * physical site conditions and hazards. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated at a sampling site as specified in the Performance Evidence * resources, equipment and materials: * use of specific tools and equipment required for the specified biological sampling to be performed * use of personal protective equipment * use of preservatives and cleaning agents * specifications: * use of workplace procedures and processes for sample collection preservation and storage * access to specific safety data sheets for preservatives and cleaning agents * use of workplace sampling plan * access to standards and protocols for biological sampling   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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