



**Australian Government**

**Assessment Requirements for MSL975045  
Perform laboratory-based ecological  
techniques**

**Release: 1**

# Assessment Requirements for MSL975045 Perform laboratory-based ecological techniques

## Modification History

Release	Comments
Release 1	<p>This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>.</p> <p>Supersedes and equivalent to MSL975017 Perform laboratory-based ecological techniques. Changes to elements and performance criteria. Foundation skills information added. Range of conditions removed. Assessment requirements amended.</p>

## Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- effectively identified and classified at least 5 different animal and plant species for scientific and experimental purposes
- processed, labelled, preserved and stored at least 5 different kinds of specimens, taking care not to contaminate sterile environments or specimens
- performed procedures and analyses to monitor the physiology of 5 different organisms/specimens in the experimental environment and maintained their viability.

## Knowledge Evidence

There must be evidence the candidate has knowledge of:

- growth requirements of organisms that are subjects of laboratory or greenhouse culture or propagation relevant to job role
- general anatomy of plants and animals that is useful as classification data
- processes that are essential for preservation of plant and animal material for use as reference material
- relationships between field and laboratory data that are useful in giving commentary on the integrity or distress in biological environments
- rationale for selection of techniques used to monitor the experimental environment and the effects of variables on organisms in the experimental environment
- uses of environmental impact statements that incorporate the results of field and laboratory analyses
- workplace and/or legal traceability requirements
- awareness of environmental sustainability issues as they relate to the work task

- legal, ethical and work health and safety (WHS) requirements specific to the work task including traceability, confidentiality and security requirements of all client information, and laboratory data and records.

## Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
  - equipment and resources for investigating the physiology of plants and animals in the laboratory
  - workplace procedures, sampling plans, test methods and equipment manuals
  - computers and programs for simulated experiments or data analysis
  - items of equipment, reagents, specimens and systems for botanical and zoological techniques
  - laboratory information management systems (LIMS), databases, record and filing systems, including specimen accessioning.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

## Links

Training Package Companion Volumes -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>