



Australian Government

AHCPER221 Recognise characteristics of integrated plant and animal systems

Release: 1

AHCPER221 Recognise characteristics of integrated plant and animal systems

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Application

This unit of competency describes the skills and knowledge required to recognise an integrated ecological system for plants and animals and their roles in a permaculture design.

The unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. They undertake defined activities and work in a structured context.

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

Pre-requisite Unit

Nil

Unit Sector

Permaculture (PER)

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. Recognise plant and animal interactions from a planned permaculture system	1.1 Source design plan for a permaculture system from supervisor 1.2 Identify planned key plant species and their characteristics for site 1.3 Identify planned key animal species and their characteristics for site 1.4 Identify planned interactions between plants and animals in the permaculture system

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Observe plant and animal interactions at an active permaculture site	2.1 Undertake observations at permaculture site 2.2 Identify existing key plant species, habits and characteristics for permaculture site 2.3 Identify existing key animal species, habits and their characteristics for permaculture site 2.4 Observe and record the interaction of plants and animal species 2.5 Identify the plants and animals with an interconnectedness that supports permaculture system
3. Reconcile site observations with plan for permaculture system	3.1 Collate observations of plant and animal interactions and interconnectedness 3.2 Record inputs, outputs and intrinsic features of plants and animals in permaculture system 3.3 Compare planned plant and animal interactions with observations 3.4 Report discrepancies between planned and observed interactions to supervisor for action
4. Monitor plant and animal interactions for permaculture site	4.1 Monitor interactions between plants and animals at permaculture site 4.2 Maintain records on integrated plant and animal systems according to workplace 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.

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Code and title	Code and title	Comments	Equivalence status
----------------	----------------	----------	--------------------

current version	previous version		
AHCPER221 Recognise characteristics of integrated plant and animal systems	AHCPER209 Recognise characteristics of integrated plant and animal systems	Major change to Elements and Performance Criteria to better align to job-specific outcomes Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity	Not equivalent

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 AHCPER221 Recognise characteristics of integrated plant and animal systems

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

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, on at least one occasion, recognised the characteristics of the integration of plants and animals in a permaculture system and has:

- obtained and read a permaculture plan
- recognised planned plants and animals and their interactions for a permaculture system
- observed and recorded plants and animal interactions used in a permaculture system, including:
 - named animals and plants by common name
 - identified plants and animals commonly encountered in permaculture system
 - identified plants with useful properties
 - described animals with functions in the system
- monitored and reported discrepancies between planned and actual plant and animal interactions.

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:

- permaculture principles and practices related to integrated plant and animal systems, including:
 - practices that conserve energy and resources
 - protecting water, soil and other resources
 - obtaining a yield
 - preserving heritage or heirloom varieties and biodiversity
 - re-using or adapting materials for other functions
 - making use of vertical space
 - creating multiple functions for the same thing

- using nature as the model
- seed-saving
- animals and plants common to permaculture systems in a given region or bioregion, including:
 - common naming conventions
 - usefulness of plants and animals as products of permaculture systems
 - detrimental traits that conflict with permaculture systems
- the role or niche of animals in system and interrelationship with other animals, plants or systems, including:
 - native or wild animals and plants
 - pest and feral plants and animals
 - insects, fish, birds and reptiles, both beneficial and detrimental to permaculture systems
 - principles of integrated plant and animal systems.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated on a permaculture site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools and equipment for conducting observations
- specifications:
 - workplace procedures for reporting and records
 - permaculture plan and specifications
- relationships:
 - supervisor.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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