



Australian Government

AHCPER417 Investigate and recommend species for a permaculture system

Release: 1

AHCPER417 Investigate and recommend species for a permaculture system

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 assess the plants, animals, insects and microbiological species required in a permaculture system, including their characteristics and cultural requirements, evaluate suitability of specific species, and present recommendations and cultural requirements to client for a permaculture system.

The unit applies to individuals who take responsibility for their own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

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. Assess the needs of the permaculture system for species	1.1 Access plans and design criteria for permaculture system 1.2 Identify environmental and climatic conditions for permaculture site 1.3 Determine primary characteristics and uses for species in

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	permaculture system with client 1.4 Investigate interrelationships of species for a sustained permaculture system 1.5 Determine diversity of species in permaculture system 1.6 Summarise characteristics for each biological element required for permaculture system
2. Investigate species to achieve permaculture system outcomes	2.1 Investigate and identify plant species reflecting characteristics required in permaculture system 2.2 Investigate and identify animal species reflecting characteristics required in permaculture system 2.3 Investigate and identify invertebrate and microbial species reflecting characteristics required in permaculture system 2.4 Assess and confirm value of each identified species for roles or functions required in permaculture system 2.5 Select and document species identified according to biological naming conventions
3. Recommend species and cultural requirements for a permaculture system design	3.1 Investigate and document cultural requirements and conditions for each species selected 3.2 Investigate and document expected interactions and interrelationships for species in permaculture system 3.3 Compile documentation into formal recommendation according to workplace format 3.4 Present recommendation to client for feedback and approval 3.5 Review and rectify recommendations according to client feedback
4. Evaluate suitability of species in a permaculture system	4.1 Monitor implementation and development of permaculture system 4.2 Evaluate suitability of species in design 4.3 Re-assess underperforming species and investigate alternative options 4.4 Maintain records of species performance for future reference

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
Writing	Prepare and produce client recommendations and specifications, including diagrammatic models, to illustrate complex permaculture system species interactions
Oral communication	Use collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals, to convey information, clarify feedback and confirm client requirements for recommendations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCPER417 Investigate and recommend species for a permaculture system	AHCPER413 Evaluate suitability of species as solutions for permaculture applications	Redesigned unit to reflect a job outcome and better reflect industry outcomes Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity Addition of Foundation Skills	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 AHCPER417 Investigate and recommend species for a permaculture system

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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, on at least one occasion, investigated and recommended species for a permaculture system design and has:

- assessed needs and outcomes of a permaculture system with a client
- identified characteristics of species for a system, which must include each of the following:
 - six (6) plants
 - two (2) animals
 - two (2) invertebrates
 - one (1) microbiological
- investigated and assessed species for each group of species for use in a permaculture system, and their interrelationships
- compiled and documented recommendations and cultural requirements for species meeting identified characteristics for permaculture system
- presented recommendations to client and acted on feedback
- monitored and recorded species and their success in a permaculture system.

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:

- principles and practices of permaculture related to needs of species and systems
- fundamentals of biological organisms, interactions, classification and nomenclature, including:
 - plants as produce, fodder, soil improvers, pest control
 - animals as produce, pest control, waste processing, soil improvers
 - invertebrates as food, soil improvers, pests and biocontrol

- common microorganisms used in permaculture, including produce, yeasts and useful bacteria for plant and animal culture
- research methodologies and documenting outcomes of research
- system design process
- permaculture design strategies for species selection and interrelationships
- comparative analysis techniques
- critical evaluation techniques for both written and graphic representations of permaculture design
- dealing with clients
- documenting and presenting recommendations.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated for a permaculture system design or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - research tools and references
- specifications:
 - permaculture design specifications and client brief
 - biological naming convention
- relationships:
 - client.

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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