



**Australian Government**

# **AHCPER318 Plan propagation activities for a permaculture system**

**Release: 2**

# AHCPER318 Plan propagation activities for a permaculture system

## Modification History

| Release   | Comments                                                                                                                 |
|-----------|--------------------------------------------------------------------------------------------------------------------------|
| Release 2 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 2.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0. |

## Application

This unit of competency describes the skills and knowledge required to plan propagation activities for a permaculture system. It requires the application of permaculture principles, seasonal propagation opportunities, organic principles and plant growth science.

All work is carried out to comply with workplace procedures.

This unit applies to individuals who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems.

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

## Pre-requisite Unit

Nil

## Unit Sector

Permaculture (PER)

## Elements and Performance Criteria

| Element                                          | Performance criteria                                                                                   |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i> |
| 1. Research propagation                          | 1.1 Assess propagation needs according to garden needs or                                              |

| Element                                            | Performance criteria                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>   | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                     |
| requirements for the permaculture system           | permaculture design<br>1.2 Consider opportunities for propagation from local area, such as seed banks, tree or shrub prunings, unusual varieties to be traded or varieties purchased for propagation<br>1.3 Determine numbers of new plants to be produced for the needs of the system and/or for swapping, selling or community needs                                                                                                                     |
| 2. Develop the propagation plan                    | 2.1 Prepare a propagation plan according to research undertaken<br>2.2 Ascertain best methods for species to be propagated and include them in the propagation plan<br>2.3 Construct a seasonal or monthly timeline or calendar to keep track of propagation requirements<br>2.4 Maintain the propagation plan as an active document through the seasons                                                                                                   |
| 3. Implementing the propagation plan               | 3.1 Consult the propagation plan when planning monthly activities<br>3.2 Clear space in the propagating area for the activity to be undertaken<br>3.3 Set up materials and equipment for propagation work<br>3.4 Organise propagules and apply pre-treatments if required<br>3.5 Create new plants in prepared containers or the garden area according to the propagation plan<br>3.6 Water, fertilise, label, mulch, stake and tie new plants as required |
| 4. Maintaining propagated plants to end use        | 4.1 Maintain new plants by watering, sheltering and checking for pest or disease attack<br>4.2 Remove any new plants that have failed to thrive to avoid cross-contamination<br>4.3 Apply allowable organic treatments to new plants if required<br>4.4 Harden off new plants in a protected place before planting, selling or swapping                                                                                                                    |
| 5. Maintain a healthy and orderly propagation area | 5.1 Maintain tidiness and orderliness of propagating area<br>5.2 Store propagating materials, potting media and containers for future use<br>5.3 Remove any weed or moss growth regularly to ensure basic hygiene of the propagating and hardening off spaces                                                                                                                                                                                              |

## 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<br>current version                                         | Code and title<br>previous version                                        | Comments                            | Equivalence<br>status |
|---------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------|-----------------------|
| AHCPER318 Plan propagation activities for a permaculture system Release 2 | AHCPER318 Plan propagation activities for a permaculture system Release 1 | Minor typographical error corrected | Equivalent unit       |

## 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 AHCPER318 Plan propagation activities for a permaculture system

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## Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- research propagation requirements for the permaculture system
- develop a propagation plan
- implement a propagation plan
- maintain propagated plants to maturity or end use.

## Knowledge Evidence

The candidate must demonstrate knowledge of:

- permaculture principles and practices related to propagation:
  - using reclaimed or reused containers (suitably cleaned to avoid cross-contamination)
  - labelling systems using reclaimed materials
  - maintaining rare and unusual varieties
  - using edges and valuing the marginal – unusual plants in micro-climates
  - sharing and swapping to increase biodiversity and mutual wellbeing
  - preserving provenance of locally indigenous species
  - testing and trialling for new plants or resistant varieties
  - global food plant preservation, including seed saving
- propagation plan including such considerations as:
  - seasonal activities
  - seed saving
  - needs of the system for plants

- mother plant location and frequency of use
- schedules and timelines
- principles of sustainable horticultural practices
- propagation techniques, such as:
  - cuttings – softwood, hardwood, semi-hardwood, root and tip
  - layering – stool, aerial and runner
  - division
  - grafting – whip and tongue, saddle, wedge, approach and bench
  - budding – shield and patch
  - seed sowing
- potting media suitable for propagation in a garden setting, such as:
  - compost and worm casting mixes
  - sieved and graded sands
  - blends used for different purposes or different times of the year
  - sphagnum moss
  - water (hydroponics or aquaponics)
- plant growth, development and nutrition
- botany and physiology
- maintaining moisture levels in simple systems without causing disease
- systems for protecting new plants and seedlings, such as:
  - polyhouse or shade-house systems, including hoop systems on garden beds
  - systems using reclaimed materials, such as bag-and-frame cloches, bottle protectors for seedlings, tyre stacks, birdcages and wire baskets
  - glass houses
  - shade houses
  - naturally occurring or planned microclimates
- minimal environmental impact waste disposal and composting systems which destroy pathogens.

## Assessment Conditions

Assessors must satisfy current standards for RTOs. Assessors must also hold a nationally accredited Certificate III (or higher) in Permaculture. Completion of a Permaculture Design Course (PDC) is not sufficient at this level.

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