



Australian Government

AHCPER423 Design harvesting and storage systems for permaculture products

Release: 1

AHCPER423 Design harvesting and storage systems for permaculture products

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 determine requirements for optimum conditions and plan for harvesting and storage of produce to meet year-round supply of fresh and stored products from 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.

Licensing, legislative or certification requirements may apply to this unit where permaculture produce used for human consumption is handled, processed or distributed. Users are advised to check with the relevant regulatory authority.

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. Determine harvesting and storage system requirements	1.1 Determine range and type of produce to be harvested and stored with stakeholders 1.2 Determine seasonal requirements for produce 1.3 Define optimum harvesting, processing and storage techniques for

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	produce 1.4 Determine resource requirements for harvesting and storage system
2. Identify requirements for maintaining optimum condition of permaculture products	2.1 Determine maintenance requirements of stored produce 2.2 Identify treatment requirements for produce 2.3 Determine preservation techniques and processes for produce 2.4 Identify preparation requirements for storage of produce
3. Prepare harvesting and storage plan	3.1 Estimate volumes of produce to be harvested and stored 3.2 Prepare a seasonal schedule of produce to be harvested and stored 3.3 Select treatment, preparation and preservation methods for produce 3.4 Design method and layout of storage area for produce 3.5 Document a harvesting and storage plan
4. Present harvesting and storage system to stakeholders	4.1 Assess and plan training needs for harvesting and storage plan with stakeholders 4.2 Compile plans, designs and schedules into a harvesting and storage system 4.3 Present the harvesting and storage system to stakeholders for approval

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 current version	Code and title previous version	Comments	Equivalence status
AHCPER423 Design harvesting and storage systems for permaculture products	AHCPER407 Design harvesting and storage systems for permaculture products	Minor changes to Application, Elements and Performance Criteria for clarity and compliance with Training Package standards Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity	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 AHCPER423 Design harvesting and storage systems for permaculture products

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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, designed a harvesting and storage system for produce harvested from a permaculture system and has:

- determined harvesting, post-harvest and storage system requirements with stakeholders
- identified requirements for maintaining optimum condition of produce from a permaculture system
- identified resource requirements, which must include:
 - location
 - materials and layout
 - budget
- prepared a harvesting and storage plan
- assessed training needs
- documented harvesting and storage system
- communicated harvesting and storage system to stakeholders.

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:

- products commonly harvested and stored from a permaculture system
- design systems for meeting year-round supplies of fresh and stored produce, including:
 - growing requirements and crop regulation strategies
 - calendar or seasonal chart with planting times of crops
 - selection of early, mid-season and late season varieties to extend harvest
 - number of plants and area to be planted
 - crop regulation and maintenance program involving tipping, mounding, thinning, staking

- sequential planting and/or harvesting schedules
- climatic conditions for harvesting crop, including appropriate time of day
- harvest and post-harvest factors influencing plant metabolism and quality
- post-harvest treatment and preparation, including:
 - flow chart of harvest, treatment, preservation and storage process
 - harvest and post-harvest treatment timelines and schedules
 - design or plans of processing and storage area
 - design of processing technology or equipment, including solar food dryer
 - materials, tools, equipment and ingredients
 - manuals and operating instructions for equipment
 - recipes and instructions
 - anticipated shelf-life of product
 - labelling and recording systems
 - work health and safety, food safety, hygiene and other relevant enterprise and work practices
- preservation methods and processes for produce
- technologies used in crop processing, treatment, preservation and storage systems
- design of storage areas
- developing planting and harvesting schedules for products from a permaculture system
- identifying training needs for harvest and storage workers, including:
 - work health and safety, and other relevant enterprise and work practices
 - food safety and hygiene standards
 - appropriate clothing and personal protective equipment (PPE)
 - harvest and post-harvest handling, processing and storage practices
 - food preserving techniques
 - operation and maintenance of tools and equipment
 - reporting, recording and labelling procedures
- preparing plans and reports
- food safety, health and hygiene requirements for preservation and storage of products for human consumption.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated in a poly-cropping system or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - crops, preservation treatments and storage information
- specifications:

- safety data sheets
- stakeholder specifications
- specific legislation, regulations and codes of practice for food handling and storage
- relationships:
 - stakeholders
- timeframes:
 - according to timeframes specified for storage system.

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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