



Australian Government

AHCPER416 Manage a seed bank

Release: 1

AHCPER416 Manage a seed bank

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 develop and implement a seed collection plan, including extraction, treatment and storage procedures required to maintain a seed collection for a managed seed bank.

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.

Legislation, regulations and by-laws relating to the collection and removal of plant materials from public and private land apply nationally and in some states, territories and jurisdictions. Users are advised to check with the local relevant 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. Plan seed collection for a seed bank	1.1 Identify purpose and scope of seed bank 1.2 Investigate and interpret seed characteristics for method of collecting 1.3 Identify opportunities for seed collection from field observation and liaison with stakeholders in this field

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Identify site, site conditions and plants for seed collection 1.5 Identify site specific hazards, assess risk and develop control procedures according to workplace health and safety policies 1.6 Identify governing authority for site and contact stakeholder 1.7 Obtain permits and approvals required for seed collection site according to regulations and tenure 1.8 Select method of seed collection according to seed type and site conditions 1.9 Determine and document quantity of seed to be collected from each provenance
2. Implement seed collection program	2.1 Coordinate and schedule work team 2.2 Coordinate resources and equipment required for seed collection 2.3 Confirm and provide access to permits and approvals according to regulatory requirements 2.4 Instruct work team on health and safety procedures 2.5 Oversee seed collection activities according to seed collection plan and health and safety procedures 2.6 Oversee seed cleaning activities according to workplace procedures 2.7 Maintain seed collection labels and records according to regulations and workplace procedures
3. Maintain a seed collection	3.1 Check quantity, quality and provenances of collected seed 3.2 Monitor viability and health of seed collected 3.3 Implement pest and disease control procedures 3.4 Maintain optimum seed storage conditions 3.5 Dispose of non-viable seeds according to workplace environmental procedures 3.6 Package, label and distribute seed according to quality standards and workplace procedures 3.7 Maintain record of stored seed

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 applications and documentation clearly and accurately using appropriate industry terminology to convey regulatory information required for statutory approvals • Maintain accurate records of seed source, species, provenance and other relevant characteristics using biological naming conventions and terminology

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCPER416 Manage a seed bank	AHCPER409 Manage a permaculture seed bank	Changed title to remove specificity Changes to Application, Elements and Performance Criteria to broaden use and for clarity 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 AHCPER416 Manage a seed bank

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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, managed a seed bank and has:

- planned seed collection program, which must include:
 - plant botanical and vernacular name
 - seed characteristics
 - mapping the location of site and plants on site
 - planning collection strategy according to geography, size and type of plants
 - obtaining approvals according to site tenure
- overseen seed collection activities for program
- developed and monitored safety procedures for seed collection team
- maintained a seed collection to ensure maximum viability
- maintained records, labels and permits for seed collection program.
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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:

- flowering biology of the target species
- biological signs that indicate seed crop maturity
- types of seed banks and their purpose, including:
 - community seed banks and networks
 - private and commercial seed collections
 - commercial seed distribution
 - organic food production enterprises
 - heritage and non-hybrid seed collections

- methods of seed collection, including:
 - hand-picking seeds and fruits
 - harvesting plants or plant parts
 - collecting and ripening fruit
 - shaking
- extraction of seed from chaff and waste
- handling of the seed crop after picking
- storage of seed, including:
 - storage containers, including bags, paper envelopes, plastic or glass containers, foil
 - environmental conditions for storage, including cool, dry, dehumidifying agents (silica gel, wood ash), oxygen exclusion techniques and freezer/refrigerator
 - pest deterrent mechanisms
 - light exclusion mechanisms
- documentation of the extracted seed, including:
 - information on provenance
 - botanical name: family, genus, species, variety and/or cultivar
 - common names
 - brief plant description
 - identity of collector
 - date collected or use-by date
 - quantity (by weight or number of seeds)
 - viability test results
 - organic certification of grower
 - growing instructions such as recommended season and spacing
- provenance of seed, including:
 - location and growing conditions of parent plant
 - sub-catchment identification of seed from endemic native plant populations
 - species and/or varieties adapted to local conditions
- collecting ethics, protocols and legislative parameters, including:
 - limits on quantity allowed for collection
 - limits on time period for collection
 - particular use or destination for seed
 - indigenous plant regulatory conditions
 - permits and authorities for site tenure
- safe work practices when harvesting seed, including working at heights.
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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 the field for specific seed collection site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools and equipment for seed collection
 - health and safety equipment
- specifications:
 - workplace policies, procedures, processes
 - manufacturer operating instructions for equipment
 - specific legislation and codes of practice
- relationships:
 - stakeholders
- timeframes:
 - according to seasonal variations
 - according to seed viability period.

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

Links

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