



Australian Government

Department of Education, Employment and Workplace Relations

FPIFGM3201B Manage seed collection

Release: 1

FPIFGM3201B Manage seed collection

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to plan and monitor the implementation of seed collection or sowing programs. The unit includes collection of native and non-native species

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPIFGM3201A Manage seed collection

Application of the Unit

Application of the unit

The unit involves managing seed collection in a variety of work settings, including:

- forest environments
- farms
- agriculture
- nurseries
- local councils

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|--|--|
| 1. Plan seed collection | <p>1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to managing <i>seed collection</i> are identified and followed</p> <p>1.2. Site <i>environmental protection measures</i> are identified and adhered to in line with relevant legislation and regulations</p> <p>1.3. Seeding and/or planting program is analysed and required <i>seed characteristics</i> and <i>implementation issues</i> are identified</p> <p>1.4. Seed collection <i>opportunities</i> are identified and a suitable area for seed collection is determined and documented</p> <p>1.5. <i>Method of seed collection</i> is selected and quantity, cost and <i>impacts</i> on provenances and species to be collected are determined and documented</p> <p>1.6. Required <i>approvals</i> are identified, sought and obtained from relevant authorities</p> <p>1.7. Measurable performance indicators, specifications and targets are determined and documented</p> <p>1.8. Seed collection <i>plan</i> and its performance indicators are clearly documented and communicated to <i>appropriate personnel</i></p> |
| 2. Implement and monitor seed collection | <p>2.1. <i>Resources</i> required for seed collection are coordinated and scheduled and required <i>documentation</i> is completed clearly and accurately</p> <p>2.2. Relevant <i>individuals, bodies and groups</i> are consulted as required using appropriate interpersonal techniques</p> <p>2.3. Seed collection plan is implemented and monitored in line with quality standards for seed collection</p> <p>2.4. Systematic <i>checks</i> are carried out to ensure compliance requirements relevant to seed collection activities are adhered to</p> <p>2.5. Adjustments to seed collection activities are made as required and communicated to appropriate personnel</p> <p>2.6. <i>Communication</i> with others is established and maintained in line with OHS requirements</p> <p>2.7. <i>Limitations</i> are identified and assistance is sought as required in line with workplace procedures</p> |
| 3. Review seed | 3.1. Data and documentation from seed collection are |

| ELEMENT | PERFORMANCE CRITERIA |
|------------|--|
| collection | <p>assessed and evaluated to confirm techniques, methodologies and budgets are in line with plan</p> <p>3.2. Issues and impediments to seed collection activities and program costs are identified and documented</p> <p>3.3. Cost benefit analysis is prepared and recommendations are made, based on the analysis of data and identified issues</p> <p>3.4. Results of seed collection are clearly communicated and disseminated to appropriate personnel</p> <p>3.5. Seed collection process is <i>recorded and reported</i> to the appropriate personnel</p> |

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; collate and assess information against specified criteria; supervise operational staff and contractors to achieve specific outcomes; recognise common diseases, pests and nutritional deficiencies; efficiently and safely manage the extraction of collected material
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others, including landholders, and internal and external bodies and groups
- Literacy skills sufficient to record and report workplace information; maintain documentation; write reports and submissions in appropriate style and format
- Numeracy skills sufficient to interpret numerical data; identify quantities and costings
- Problem solving skills sufficient to identify problems and equipment faults; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for managing seed collection
- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for

REQUIRED SKILLS AND KNOWLEDGE

managing seed collection

- Environmental risks and hazards
- Flowering biology of the target species
- Biological signs that indicate that the seed crop is ready to be collected
- Procedures to extract and handle seed from collected material, including handling procedures of the seed crop after picking
- Treatment and documentation requirements of extracted seed
- Seed collection methods
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently plan and supervise the implementation of seed collection activities within applicable environmental, legislative and organisational guidelines

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to managing seed collection
- following organisational policies and procedures relevant to managing seed collection
- developing measurable performance indicators, specifications and targets and a seed collection plan within specified budgetary guidelines
- coordinating and scheduling resources, and managing the work of others to achieve specific outcomes
- monitoring seed collection operations, ensuring that relevant quality standards are followed
- documenting results from seed collection activities and preparing a report for dissemination to relevant personnel

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace

EVIDENCE GUIDE

Method of assessment

- materials and equipment relevant to undertaking work applicable to this unit
- specifications and work instructions
- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Italicised** wording, if used in the performance criteria, is detailed below. Essential operating

RANGE STATEMENT

conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS requirements:

are to be in line with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements may include:

Legislative requirements:

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility

RANGE STATEMENT

- quality assurance
 - procedural manuals
 - quality and continuous improvement processes and standards
 - OHS, emergency and evacuation procedures
 - ethical standards
 - recording and reporting requirements
 - equipment use, maintenance and storage requirements
 - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Seed** may include:
- native species
 - non-native species
- Seed collection** may include:
- seed orchards
 - forests
 - softwoods and hardwoods
 - rainforest
 - understorey plants
- Environmental protection measures** may include:
- ground growth
 - canopy
 - general forest lean
 - wind speed and direction
 - fallen trees
 - density of trees
 - ground slope
 - soil and water protection
 - ground hazards and obstacles
 - contingencies for modifying operations during wet or other adverse weather conditions
 - hygiene of the area
 - relevant commonwealth, state or territory, and local legislation and regulations
- Seed characteristics** may include:
- provenance
 - potential growth characteristics
 - forest types
 - optimum time to collect
 - physiology and biology
 - dormancy
 - species

RANGE STATEMENT

Implementation issues may include:

- scheduling
- people and skills involved
- materials
- hazards
- seed quantities
- selection

Opportunities may include:

- field observation
- organisational and other relevant information

Method of seed collection may include:

- climbing
- removal of branches with rifle
- elevated platform vehicles

consideration of the:

- geography of the local area
- size and type of trees
- available resources
- organisational guidelines

and may also include:

- collecting after falling or felling
- ladders
- shaking
- high-powered rifles
- cherry pickers

Impacts may include:

- requirements for genetic diversity
- frost
- heat
- salt hardiness
- potential growth characteristics

Approvals may include:

- heritage requirements
- environmental sustainability requirements
- other issues applying to seed collection operation

Plan may include:

- organisational terminology
- guidelines
- budgets
- policies and timelines
- internal memos
- resources, including people, material and equipment

Appropriate personnel may

- clients

RANGE STATEMENT

include:

- colleagues
- line management

those collecting the seed, such as:

- organisational employees
- contractors
- community groups

Resources may include:

- people
- material
- equipment

Documentation may include:

- provenance
- seed species and location
- identity of collector
- weight of seed collected

Individuals, bodies and groups may include:

- landholders
- commonwealth, state or territory, and local government authorities
- private individuals

Checks may include:

ensuring:

- relevant organisational OHS procedures, practices, policies and precautions are observed and followed
- site environmental requirements follow relevant commonwealth, state or territory, and local legislation and regulations
- performance indicators, targets and specifications are met
- quantity, cost and provenances collected are in line with plan specifications
- required organisational documentation is completed clearly and accurately

Communication may include:

- verbal and non-verbal language
- constructive feedback
- active listening
- questioning to clarify and confirm understanding
- use of positive, confident and cooperative language
- use of language and concepts appropriate to individual social and cultural differences
- control of tone of voice

RANGE STATEMENT

Limitations may include:

- job role and responsibilities
- own competency level
- industry requirements
- own understanding of risk identification processes
- own interpretation of legislation, regulations and procedures
- OHS and environmental requirements

Records and reports may include:

- difficulties or issues faced
- recommendations for future work, results and costs
- collation of information or documentation
- interpreting information in a way relevant to workplace requirements
- organising and maintaining records accurately
- using a full range of information media, including written, printed, verbal, electronic, visual display units and personal computers

and may be:

- manual
- computer-based system
- other appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field

Forest Growing and Management