

U17602**Maintain plants outdoors**

Unit Descriptor:

This unit is about maintaining the health and appearance of plants in an outdoor environment. It is for members of staff who can carry out the work described under limited supervision only.

You could use this unit either in the context of:

- woody plants (shrubs and trees)
- or herbaceous and bedding plants

The typical tasks you would carry out to complete this unit include:

- monitoring the health and vigour of plants as specified
- identifying ill health and potential causes of ill health
- controlling pests and diseases and weeds by physical, cultural and chemical means using manual and powered equipment
- rectifying soil and environmental conditions likely to induce ill health in plants
- removing competing growth, such as weeds and other unwanted plants
- formative and detailed pruning of trees and shrubs from the ground, using hand tools and powered equipment (for example, hydraulic secateurs or hedge trimmers, if assessed in the context of woody plants)

Use of equipment and chemicals must meet the requirements of the law and industry codes of practice.

ELEMENT**PERFORMANCE CRITERIA**

To be competent you must achieve the following:

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| 1. Maintain the health of plants outdoors | 1.1 Inspect plants as requested. |
| | 1.2 Identify any threats to plant health . |
| | 1.3 Use appropriate methods to promote and maintain healthy growth. |
| | 1.4 Use methods of dealing with threats to plant health which are correct and effective. |
| | 1.5 Select and use tools, equipment and materials safely and efficiently. |

- 1.6 Keep damage, unnecessary waste, unwanted impact to plants and environmental pollution to a minimum.
 - 1.7 Clean tools and equipment, and return tools, equipment and materials to secure storage following use.
 - 1.8 Maintain the health and safety of yourself and others at all times.
2. Remove unwanted plant growth
- 2.1 Select and use tools and equipment efficiently and correctly.
 - 2.2 Identify **unwanted plant growth** correctly.
 - 2.3 Use **removal methods** that are appropriate to the species, the plant's stage of development and the time of year.
 - 2.4 Keep damage, unnecessary waste and unwanted impact to plants and site to a minimum.
 - 2.5 Dispose of debris correctly.
 - 2.6 Leave the site in a clean and tidy condition.
 - 2.7 Clean tools and equipment, and return tools, equipment and materials to secure storage following use.
 - 2.8 Maintain the health and safety of yourself and others at all times.

RANGE STATEMENT

You must cover the items bellows:

Element 1: Maintain the health of plants outdoors

A. Identify all of the following **threats to plant health**:

- (i) pests
- (ii) diseases
- (iii) disorders
- (iv) unfavourable conditions
- (v) competing growth

B. Use three of the following methods to **promote** plant health:

- (i) feeding
- (ii) watering
- (iii) surface cultivation
- (iv) mulching

C. Use three of the following methods for **dealing** with threats to plant health:

- (i) physical
- (ii) chemical
- (iii) cultural
- (iv) irrigation

Element 2: Remove unwanted plant growth

A. Identify and deal with all of the following types of **unwanted plant growth**:

- (i) diseased
- (ii) damaged
- (iii) dead
- (iv) non-typical
- (v) badly positioned

B. Use all of the following **removal methods**:

- (i) formative pruning
- (ii) routine pruning

UNDERPINNING KNOWLEDGE AND SKILLS

1. Why it is important to check the condition of plants according to agreed schedules.
2. How the seasons affect the way you maintain plants.
3. Signs of damage or threats to plant health.
4. How to respond to signs of damage or threats to plant health.
5. The impact of soil conditions on plant growth.
6. The difference in watering regimes for different types of soil.
7. The effects of different types of fertilizers.
8. The chemicals you can use for pest, disease and weed control.
9. Cultural methods of improving health and vigour of plants.
10. The effects of base dressing, top dressing and liquid feeding.
11. The tools and equipment you need to maintain plant health.
12. How to use, maintain, clean and store such equipment correctly.
13. How environmental pollution may happen when you are maintaining plants and how to prevent it.
14. The relevant health and safety legislation and codes of practice.
15. The reasons for the types of removal methods in the range and when to use them.
16. How to identify unwanted growth.
17. Pruning requirements.
18. The impact of seasonality on pruning.
19. The types of tools and equipment that you can use to remove such growth.
20. How to select the correct tools and equipment.
21. How to select and apply methods which are appropriate to the species and the type of growth.
22. The importance of minimizing damage and unnecessary waste and how to do so.
23. What unwanted impact to a site is and how to avoid it.

EVIDENCE GUIDE

For assessment purposes:

(1) Critical Aspects of Evidence

Assessment should involve observation of how you maintain the health and appearance of woody plants (shrubs and trees) or herbaceous and bedding plants in an outdoor environment. You must monitor the health and vigour of plants as specified, identify ill health and potential causes of ill health as well as control pests and diseases and weeds by physical, cultural and chemical means using – manual and powered equipment.

In demonstrating competence in maintaining plants outdoors you are required to:

- A. Identify **all** of the following **threats to plant health**:
- (i) Pests
 - (ii) Diseases
 - (iii) Disorders
 - (iv) Unfavourable conditions
 - (v) Competing growth
- B. Use **three** of the following methods to **promote plant health**:
- (i) Feeding
 - (ii) Watering
 - (iii) Surface cultivation
 - (iv) Mulching
- C. Use **three** of the following methods for **dealing** with threats to plants health:
- (i) Physical
 - (ii) Chemical
 - (iii) Cultural
 - (iv) Irrigation
- D. Identify and deal with **all** of the following types of **unwanted plant growth**:
- (i) Diseased
 - (ii) Damaged
 - (iii) Dead
 - (iv) Non-typical
 - (v) Badly positioned
- E. Use **all** of the following **removal methods**:
- (i) Formative pruning
 - (ii) Routine pruning

Use of equipment, chemical and all other activities must meet the requirements of the law and relevant safety and health codes of practice.

(2) Methods of Assessment

Observation by your assessor of you:

- Selecting and using tools and equipment efficiently and correctly
- Identifying any threat to plant health
- Using the appropriate methods to promote and maintain healthy growth
- Selecting and using tools, equipment and materials safely and efficiently
- Identifying unwanted plant growth correctly
- Disposing of debris correctly

Answers to written or oral questions from your assessor.

(3) Context of Assessment

Evidence from simulations is **not** acceptable for this unit.