

**MANAGING ENVIRONMENTAL RESOURCES**  
**Access 1**

**Third edition – published November 2002**

**NOTE OF CHANGES  
THIRD EDITION PUBLISHED NOVEMBER 2002**

**SUBJECT TITLE:** Managing Environmental Resources (Access 1)

**Introductory Information**

Details: Minor text changes to information on units  
Minor text changes to information on certification  
Minor text changes to Special Needs Statement

**National Unit Specification**

New units included:

*D93J 07 Planning an Environmental Area – Identifying a Suitable Site*  
*D93K 07 Planning an Environmental Area – Identifying Suitable Plants, Tools and Equipment*  
*D93L 07 Planning an Environmental Area – Preparing a Plan*  
*D93M 07 Monitoring and Maintaining an Environmental Area – Monitoring*  
*D93N 07 Monitoring and Maintaining an Environmental Area – Maintaining*

## MANAGING ENVIRONMENTAL RESOURCES (ACCESS 1)

The Managing Environmental Resources provision at Access 1 comprises eight units:

<b>D93J 07</b>	<b><i>Planning an Environmental Area – Identifying a Suitable Site (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D93K 07</b>	<b><i>Planning an Environmental Area – Identifying Suitable Plants, Tools and Equipment (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D93L 07</b>	<b><i>Planning an Environmental Area – Preparing a Plan (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D2SR 07</b>	<b><i>Developing an Environmental Area – Propagation (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D2SS 07</b>	<b><i>Developing an Environmental Area – Preparation (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D2ST 07</b>	<b><i>Developing an Environmental Area – Planting Out (Acc 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D93M 07</b>	<b><i>Monitoring and Maintaining an Environmental Area – Monitoring (Access 1)</i></b>	<b><i>1 credit (40 hours)</i></b>
<b>D93N 07</b>	<b><i>Monitoring and Maintaining an Environmental Area – Maintaining (Access 1)</i></b>	<b><i>1 credit (40 hours)</i></b>

## RECOMMENDED ENTRY

Entry is at the discretion of the centre.

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### Administrative Information

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## **Introductory Information:**

### **Managing Environmental Resources (Access 1)**

#### **RATIONALE**

Access 1 Managing Environmental Resources comprises an introductory group of units which, through a mainly practical approach, will promote an active interest in the natural environment. Completion of the units will contribute to the candidate's general, scientific and vocational education by offering first-hand experience of the living world.

#### **AIMS**

Access 1 units are designed to:

- encourage a responsible and caring attitude to the environment
- develop skills in growing, monitoring and caring for plants and animals
- develop awareness of the main animals/mini-beasts associated with the selected environmental area
- develop personal and interpersonal skills

#### **CONTENT**

The Access 1 units can be offered in ways to suit particular circumstances. They can be delivered as free-standing units or they can be integrated. The units cover planning, developing, monitoring and maintaining an area which could be indoors or outdoors and could consist of individual containers, a flower bed, vegetable plot, greenhouse or wildlife area.

The units introduce candidates to planning and caring for an environmental area. This will include the identification of a suitable type of environmental area, its site and the plants, tools and equipment needed to develop the chosen area. Candidates will be required to make a simple plan for the environmental area. Following the planning stage, candidates will have the opportunity to prepare an environmental area from this plan or from a given plan. This will include selecting tools and materials, propagating plants, preparing the area for planting and planting out. In the last two units candidates are required to monitor and maintain an environmental area.

#### **APPROACHES TO LEARNING AND TEACHING**

A practical investigative approach should be taken to the learning and teaching of Managing Environmental Resources. Such an approach provides opportunities to develop individual and group activities using a variety of resources alongside the more traditional approaches to classroom delivery. Although individual evidence of attainment of every outcome is a prerequisite for each candidate, group activities can enhance the value of investigative work and foster personal, interpersonal and organisational skills.

#### **ASSESSMENT**

Access differs from other levels in that there is no external assessment.

Candidates should be aware of assessment criteria and instruments. It is anticipated that ongoing assessment will take place, informing and supporting candidates. Holistic approaches to assessment should be adopted. A variety of approaches to assessment may be used. Details of assessment are provided in the unit specification. The assessment of the outcome of each unit may evolve through learning and teaching activities across several units.

Wherever possible, assessment instruments should be designed to reflect learning and teaching activities and could cover more than one unit.

## **Introductory Information (cont):**

### **Managing Environmental Resources (Access 1)**

#### **GUIDANCE ON CERTIFICATION AND MODERATION**

Each Access 1 unit will normally be certificated as an individual unit. However, Access 1 units derived from units at Access 2 allow the evidence of achievement of Access 1 units to be used to count towards achievement of the relevant Access 2 unit.

To achieve unit *D553 08 Planning an Environmental Area (Access 2)* candidates would require evidence of attainment of two out of the following three units:

*D93J 07 Planning an Environmental Area – Identifying a Suitable Site (Access 1)*

*D93K 07 Planning an Environmental Area – Identifying Suitable Plants, Tools and Equipment (Access 1)*

*D93L 07 Planning an Environmental Area – Preparing a Plan (Access 1)*

Following achievement of two of these units, candidates should be entered for *D553 08 Planning an Environmental Area (Access 2)* and **not** for the remaining Access 1 unit. They should then complete the remaining outcome of the Access 2 unit. Before submitting results for the Access 2 unit, centres should ensure that candidates' skills are still current.

To allow this to happen for the Access 2 unit *D554 08 Developing an Environmental Area (Access 2)*, candidates would require evidence of attainment of two out of the following three units:

*D2SR 07 Developing an Environmental Area – Propagation (Access 1)*

*D2SS 07 Developing an Environmental Area – Preparation (Access 1)*

*D2ST 07 Developing an Environmental Area – Planting Out (Access 1)*

Following achievement of two of these units, candidates should be entered for *D554 08, Developing an Environmental Area (Access 2)* and **not** for the remaining Access 1 unit. They should then complete the remaining outcome of the Access 2 unit. Before submitting results for the Access 2 unit, centres should ensure that candidates' skills are still current.

To achieve unit *D555 08 Monitoring and Maintaining an Environmental Area (Access 2)* candidates would require evidence of attainment of one out of the following two units:

*D93M 07 Monitoring and Maintaining an Environmental Area – Monitoring (Access 1)*

*D93N 07 Monitoring and Maintaining an Environmental Area – Maintaining (Access 1)*

Following achievement of one of these units, candidates should be entered for *D555 08 Monitoring and Maintaining an Environmental Area (Access 2)* and **not** the remaining Access 1 unit. They should then complete the remaining outcome of the Access 2 unit. Before submitting results for the Access 2 unit, centres should ensure that candidates' skills are still current.

Evidence of achievement for all units should be available for moderation. Part of this evidence may be in the form of a candidate's Scottish Qualifications Certificate showing achievement of the Access 1 units, or actual evidence from doing the units if this is still within the timescale for centres to retain evidence. (See *External Assessment Moderation in National Qualifications and Higher National Qualifications: a guide for Centres* December 2001).

## **Introductory Information (cont):**

### Managing Environmental Resources (Access 1)

#### **SPECIAL NEEDS**

Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).

## National Unit Specification: general information

**UNIT** Planning an Environmental Area: Identifying a Suitable Site  
(Access 1)

**NUMBER** D93J 07

### **SUMMARY**

This unit offers opportunities for candidates to engage in activities which are mainly practical, with the purpose of identifying a suitable environmental site for planning its use.

### **OUTCOME**

Identify an appropriate type of, and site for, an environmental area.

### **RECOMMENDED ENTRY**

Entry is at the discretion of the centre.

### **CREDIT VALUE**

1 credit at Access 1 (6 SCOTCAT points\*) at SCQF level 1.

\*SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

## National Unit Specification: statement of standards

### UNIT            Planning an Environmental Area: Identifying a Suitable Site (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### OUTCOME

Identify an appropriate type of, and site for, an environmental area.

#### Performance criteria

- a) An appropriate selection is made, from a given range, of the type of environmental area to be planned.
- b) An appropriate site is identified for the environmental area to be planned.
- c) Reasons are given for selecting the site.

#### Evidence requirements

Performance evidence of the candidate's ability to select the type of environmental area, to identify the site to be planned and to justify the reasons for that choice. The evidence may be generated from group work but evidence of individual performance would need to be retained. Where evidence cannot be provided by performance alone, for example, reasons for choice of site, evidence may be provided by the candidate responding to short answer questions.

The candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal and may include one or more of the following: speech, writing, word-processing, signing, lip-reading, Braille or computer-assisted communication.

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## **National Unit Specification: support notes**

### **UNIT            Planning an Environmental Area: Identifying a Suitable Site (Access 1)**

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources Unit D553 08 Planning an Environmental Area (Access 2). Candidates may find this an appropriate unit to undertake on its own or in conjunction with the other Access 1 Units D93K 07 Planning an Environmental Area: Identifying Suitable Plants, Tools and Equipment and D93L 07 Planning and Environmental Area: Making a Plan.

This unit offers opportunities for the candidates to plan an environmental area by participating in the following activities:

- selecting type of environmental area
- selecting site

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

It is recommended that this unit is taught in a practical manner. Activities, for example, visits to parks, nature areas, garden centres and farms, will promote learning within a group situation and will give practical experience in planning and selecting for an environmental area. Sites chosen will depend on circumstances. Suggested areas are containers with plants for classrooms or centres, window boxes, hanging baskets, bottle gardens, suitable outdoor pots if available, flower or vegetable plot, greenhouse, wildlife area.

Possibilities should be discussed and the most appropriate site selected. Candidates may use libraries, videos, catalogues, visiting speakers as well or instead of visiting environmental areas themselves.

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The PCs would be assessed through direct observation of the candidate undertaking the activities and through discussions with candidates.

The observations made by staff and the responses of candidates should enable evidence to be gathered that the candidate has considered the purposes of environmental areas and the reasons for choosing a site. For example, the candidate may have chosen to grow flowers for an old folks' home and reject sites which do not get any sun.

It is not necessary for the candidate personally to record evidence. This may be done by the teacher/lecturer or other responsible person. In this situation, this person should authenticate the record by signing and dating a statement that it is an accurate record of the work of the named candidate.

Records of the candidate's evidence should be retained for moderation purposes.

## **National Unit Specification: support notes (cont)**

**UNIT**      Planning an Environmental Area: Identifying a Suitable Site  
(Access 1)

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

## National Unit Specification: general information

**UNIT** Planning an Environmental Area: Identify Suitable Plants, Tools and Equipment (Access 1)

**NUMBER** D93K 07

### SUMMARY

This unit offers opportunities for candidates to engage in activities which are mainly practical, with the purpose of identifying suitable plants and tools for use in a chosen environmental site.

### OUTCOME

Identify suitable plants, tools and equipment for the chosen environmental area.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre.

### CREDIT VALUE

1 credit at Access 1 (6 SCOTCAT points\*) at SCQF level 1.

\*SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

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## **National Unit Specification: statement of standards**

### **UNIT**      Planning an Environmental Area: Identifying Suitable Plants, Tools and Equipment (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Identify suitable plants, tools and equipment for the chosen environmental area.

#### **Performance criteria**

- a)      The basic conditions necessary for plant growth are identified correctly.
- b)      Suitable plants for the chosen environmental area are identified correctly.
- c)      Tools and equipment necessary for the chosen environmental area are identified correctly.

#### **Evidence requirements**

The candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal and may include one or more of the following: speech, writing, word-processing, signing, lip-reading, Braille or computer-assisted communication.

Evidence in the form of responses to short answer questions/personal log as follows:

For PC (a) – identifying basic conditions necessary for plant growth – warmth, light, soil, water

For PC (b) – identifying suitable plants and giving a reason for suitability

For PC (c) – identifying necessary tools and equipment and giving use

## **National Unit Specification: support notes**

### **UNIT            Planning an Environmental Area: Identifying Suitable Plants, Tools and Equipment (Access 1)**

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources Unit D553 08 Planning an Environmental Area (Access 2). Candidates may find this an appropriate unit to undertake on its own or in conjunction with the other Access 1 Units D93J 07 Planning and Environmental Area: Identifying a Suitable Site and D93L 07 Planning an Environmental Area: Making a Plan.

A suitable site will have been selected prior to starting this unit. The unit offers opportunities for candidates to plan the site by participating in the following activities:

- identifying necessary conditions for plant growth – warmth, light, soil, water
- selecting plants for the chosen area
- selecting tools and equipment for use in the chosen area

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

It is recommended that this unit is taught in a practical manner. Activities for example, planting, carrying out simple experiments on plant growth and hands-on experience of tools and equipment, will promote learning within a group situation and will give practical experience in planning and selecting for an environmental area.

Identification of suitable plants for the site should refer to their purpose, for example, colour, smell or ground cover. Information may be obtained from library, catalogues and from visiting speakers as well as or instead of candidates themselves making visits.

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The PCs should be assessed through direct observation of the candidate's undertaking the activities and through discussion with candidates.

The observations made by staff and the responses of candidates should enable evidence to be gathered that the candidate has identified what is needed for the tasks, for example, suitable plants or hand tools for digging and raking, fertiliser.

The candidate should keep a personal log including information gleaned, for example, from catalogues, visits and visitors. This log or short answer questions could provide the necessary evidence.

It is not necessary for the candidate personally to record evidence. This may be done by the teacher/lecturer or other responsible person. In this situation, this person should authenticate the record by signing and dating a statement that it is an accurate record of the work of the named candidate.

## **National Unit Specification: support notes (cont)**

**UNIT**      Planning an Environmental Area: Identifying Suitable Plants,  
Tools and Equipment (Access 1)

Records of the candidate's evidence should be retained for moderation purposes.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

## National Unit Specification: general information

<b>UNIT</b>	Planning an Environmental Area: Preparing a Plan (Access 1)
<b>NUMBER</b>	D93L 07

### SUMMARY

This unit provides a first insight into planning activities by preparing a simple plan, using some knowledge of plants and tools, for a chosen environmental site.

### OUTCOME

Prepare a simple plan for the chosen environmental area.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre.

### CREDIT VALUE

1 credit at Access 1 (6 SCOTCAT points\*) at SCQF level 1.

\*SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

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## **National Unit Specification: statement of standards**

### **UNIT**      Planning an Environmental Area: Preparing a Plan (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Prepare a simple plan for the chosen environmental area.

#### **Performance criteria**

- a) A simple plan for the chosen environmental area is prepared correctly.
- b) An approximate cost of implementing the plan is calculated.

#### **Evidence requirements**

The candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal and may include one or more of the following: speech, writing, word-processing, signing, lip-reading, Braille or computer-assisted communication.

PC (a) Evidence in the form of a labelled plan.

PC (b) Evidence of calculating an approximate cost of implementing the plan, (a calculator or other adding device may be used).

## **National Unit Specification: support notes**

### **UNIT          Planning an Environmental Area: Preparing a Plan (Access 1)**

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources Unit D553 08 Planning an Environmental Area (Access 2). Candidates may find this an appropriate unit to undertake on its own or in conjunction with the other Access 1 Units D93J 07 Planning and Environmental Area: Identifying a Suitable Site and D93K 07 Planning an Environmental Area: Identifying Suitable Plants, Tools and Equipment.

A suitable site, plants, tools and equipment will have been chosen prior to starting this unit.

This unit provides opportunities for the candidates to participate in activities involving:

- preparing a simple plan for the environmental area
- developing some understanding of costs

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

It is recommended that this unit is taught in a practical manner. Activities, for example, group work in drawing and labelling a simple plan, will promote learning within a group situation and will give practical experience in planning and selecting for an environmental area.

Candidates should be encouraged to assist with the preparation, development and production of the plan. They should also be involved in calculating the approximate cost of implementing the plan. A calculator or other adding device may be used.

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The observations made by staff and the responses of candidates should enable evidence to be gathered that the candidate has:

- prepared a simple plan of the site, for example, on squared paper
- costed the plants and materials required for example, from real or simulated catalogues, taken prices and found a realistic and approximate total cost

The PCs can be assessed through the labelled plan, lists of plants, tools and equipment and approximate cost being calculated to a realistic degree of accuracy for carrying out the plan.

It is not necessary for the candidate personally to record evidence. This may be done by the teacher/lecturer or other responsible person. In this situation, this person should authenticate the record by signing and dating a statement that it is an accurate record of the work of the named candidate.

Records of the candidate's evidence should be retained for moderation purposes.

## **National Unit Specification: support notes (cont)**

**UNIT**      Planning an Environmental Area: Preparing a Plan (Access 1)

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

## National Unit Specification: general information

<b>UNIT</b>	Developing an Environmental Area – Propagation (Access 1)
<b>NUMBER</b>	D2SR 07

### SUMMARY

This unit offers opportunities for candidates to engage in the practical activities involved in the propagation of plants.

### OUTCOME

Propagate given plants.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre. However it would be beneficial if the candidate has already been involved in a Managing Environmental Resources programme, for example a programme using Access 1 level curriculum descriptors.

### CREDIT VALUE

1 credit at Access 1.

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### Administrative Information

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## **National Unit Specification: statement of standards**

### **UNIT**                      Developing an Environmental Area – Propagation (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Propagate given plants.

#### **Performance criteria**

- (a) The selection of tools and materials is appropriate for the given task.
- (b) The propagation of given plants is carried out effectively and according to safe working practices.
- (c) Tasks carried out are recorded accurately.

#### **Evidence requirements**

PC (a) performance evidence of the candidate's selection of at least three correct tools and two materials for each task.

PC (b) performance evidence of the candidate's ability to propagate given plants according to safe working practices.

PC (c) written and/or oral evidence in the form of a simple record of the tasks completed including materials, tools and processes used.

## National Unit Specification: support notes

### UNIT                      Developing an Environmental Area – Propagation (Access 1)

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources unit, *D554 08, Developing an Environmental Area (Access 2)*. Candidates may find this an appropriate unit to undertake on its own or together with the other Access 1 units:

*D2SS 07, Managing Environmental Resources: Developing an Environmental Area – Preparation (Access 1)*

*D2ST 07, Managing Environmental Resources: Developing an Environmental Area – Planting Out (Access 1)*

This unit offers opportunities for the candidates to engage in the practical activities involved in the propagation of plants. These include:

- the selection of tools and materials
- the propagation of plants
- the use of safe working practices
- compiling a simple record of tasks carried out.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

This unit is essentially practical in nature and should provide:

- hands on experience of tools and equipment
- experience in the propagation of plants, for example
  - sowing seeds (house plant, bedding plant, vegetable and flower seeds)
  - taking cuttings
  - raising seedlings in trays, pots and directly into the ground
  - pricking out
  - hardening off young plants as appropriate.

Candidates are required to keep a simple record of processes undertaken and tools and equipment selected. This might be undertaken in a group context with each candidate making her or his own record following group discussions. This record might be kept in a number of forms: for example, drawings and photographs can be incorporated with text. It should include evidence relating to compliance with safe working practices. Further suggestions are given in Appendix 1.

## **National Unit Specification: support notes (cont)**

**UNIT**                      Developing an Environmental Area –  
Propagation (Access 1)

### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The following assessment instruments may be used for internal assessment of the unit.

All PCs could be assessed through direct observation of the candidate undertaking the activities and through discussion with the candidate. A simple candidate record/log should be kept of the tasks carried out. This may incorporate photographic evidence of the plants at various stages of development and illustrate the use of safe working practices.

Please refer to Guidance on Certification and Moderation given in the Introductory Information for further details about certification and moderation when Access 1 units are being used to contribute to an Access 2 unit.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001)

## Appendix 1

### DEVELOPING AN ENVIRONMENTAL AREA – PROPAGATION (ACCESS 1)

CONTENTS	NOTES	LEARNING ACTIVITIES
Plant propagation for example: a) seeds b) cuttings	Pre-determine plans referred to throughout. Sowing of house plant, bedding plant, vegetable, flower seeds, etc. as appropriate. Similarly taking cuttings as appropriate. Raising seedlings in trays, pots and directly into ground. Pricking out and hardening off young plants as appropriate.	Select appropriate tools and materials. Assist with given tasks safely. Keep a simple record of work.

## National Unit Specification: general information

<b>UNIT</b>	Developing an Environmental Area – Preparation (Access 1)
<b>NUMBER</b>	D2SS 07

### SUMMARY

This unit offers opportunities for candidates to be fully involved in the preparation of an area for planting.

### OUTCOME

Prepare an environmental area for planting.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre. However it would be beneficial if the candidate has already been involved in a Managing Environmental Resources programme for example, a programme using Access 1 level curriculum descriptors.

### CREDIT VALUE

1 credit at Access 1.

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## **National Unit Specification: statement of standards**

### **UNIT**                      Developing an Environmental Area – Preparation (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Prepare an environmental area for planting.

#### **Performance criteria**

- (a) The selection of tools and materials for preparing the environmental area is correct.
- (b) The preparation of the given area for planting is effective and according to the plant requirements and safe working practices.
- (c) Tasks carried out are recorded accurately.

#### **Evidence requirements**

PC (a) performance evidence of the candidate's ability to select at least two appropriate tools and two materials.

PC (b) performance evidence of the candidate's preparation of the given area in an effective way, according to safe working practices.

PC (c) oral and/or written evidence in the form of a simple record of the preparation involved in carrying out the tasks.

## National Unit Specification: support notes

### UNIT                      Developing an Environmental Area – Preparation (Access 1)

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources unit, *D554 08, Developing an Environmental Area (Access 2)*. Candidates may find this an appropriate unit to undertake on its own, or together with the other Access 1 units:

*D2SR 07, Managing Environmental Resources: Developing an Environmental Area – Propagation (Access 1)*

*D2ST 07, Managing Environmental Resources: Developing an Environmental Area – Planting Out (Access 1).*

The unit offers opportunities for candidates to engage in the practical activities involved in the preparation of an environmental area for planting. These include:

- the selection of tools and materials
- ground preparation
- the use of safe working practices
- compiling a simple record of tasks carried out.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

This unit is essentially practical in nature and should provide:

- hands on experience of the appropriate use of tools and materials
- experience in the use of safe working practices
- opportunities for compiling a simple record of work undertaken.

Candidates are required to keep a simple record of processes undertaken and tools and equipment selected. This might be undertaken in a group context with each candidate making her or his own record following group discussions. This record might be kept in a number of forms: for example, drawings and photographs can be incorporated with text. The record should include evidence relating to the effectiveness of the preparation work and compliance with safe working practices.

## **National Unit Specification: support notes (cont)**

**UNIT**                      Developing an Environmental Area –  
Preparation (Access 1)

### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The following assessment instruments may be used for internal assessment of the unit.

All PCs could be assessed through direct observation of the candidate undertaking the activities and through discussion with the candidate. A simple candidate record/log should be kept of tasks carried out. This may incorporate photographic evidence of the environmental area at various stages of preparation and illustrate the use of safe working practices.

Please refer to Guidance on Certification and Moderation given in the Introductory Information for further details about certification and moderation when Access 1 units are being used to contribute to an Access 2 unit.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001)

## National Unit Specification: general information

<b>UNIT</b>	Developing an Environmental Area – Planting Out (Access 1)
<b>NUMBER</b>	D2ST 07

### SUMMARY

This unit offers candidates the opportunity to engage in the practical activities involved in planting out an area according to a given plan.

### OUTCOME

Plant out an area according to a given plan, using safe working practices.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre. However it would be beneficial if the candidate has already been involved in a Managing Environmental Resources programme, for example a programme using Access 1 level curriculum descriptors.

### CREDIT VALUE

1 credit at Access 1.

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### Administrative Information

<b>Superclass:</b>	SD
<b>Publication date:</b>	April 2000
<b>Source:</b>	Scottish Qualifications Authority
<b>Version:</b>	02

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## **National Unit Specification: statement of standards**

### **UNIT**                      Developing an Environmental Area – Planting Out (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Plant out an area according to a given plan, using safe working practices.

#### **Performance criteria**

- (a) The selection of tools and materials for planting out is appropriate.
- (b) The planting of the given area is carried out safely and according to the given plan.
- (c) Tasks carried out are recorded accurately.

#### **Evidence requirements**

PC (a) performance evidence of the candidate selecting at least two tools and two materials suitable for use during planting out.

PC (b) performance evidence of the candidate planting out according to the given plan and working safely.

PC (c) oral and/or written evidence in the form of a simple record, recording the tasks carried out accurately.

## National Unit Specification: support notes

### UNIT                      Developing an Environmental Area – Planting Out (Access 1)

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of three units derived from the Managing Environmental Resources unit, *D554 08, Developing an Environmental Area (Access 2)*. Candidates may find this an appropriate unit to undertake on its own or together with the other Access 1 units:

*D2SR 07, Managing Environmental Resources: Developing an Environmental Area – Propagation (Access 1)*

*D2SS 07, Managing Environmental Resources: Developing an Environmental Area – Preparation (Access 1)*

The unit offers opportunities for candidates to engage in the practical activities involved in planting out. These include:

- the selection of tools and materials
- planting out according to a given plan
- the use of safe working practices
- compiling a simple record of tasks carried out.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

This unit is essentially practical in nature and should provide:

- hands on experience of the tools and equipment needed in planting out
- experience in the use of safe working practices
- the opportunity for compiling a simple record of work undertaken.

Candidates are required to keep a simple record of processes undertaken and tools and equipment selected. This may be undertaken in a group context, with each candidate making her or his own record following group discussions.

This record might be kept in a number of forms: for example, drawings and photographs can be incorporated with text. The record should include evidence relating to compliance with safe working practices.

## **National Unit Specification: support notes (cont)**

**UNIT**                      Developing an Environmental Area –  
Planting Out (Access 1)

### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The following assessment instruments may be used for internal assessment of the unit.

All PCs could be assessed through direct observation of the candidate undertaking the activities and through discussion with the candidate. A simple record/log should be kept of tasks carried out. This may incorporate photographic evidence of the area at different stages of planting out and illustrate the use of safe working practices.

Please refer to Guidance on Certification and Moderation given in the Introductory Information for further details about certification and moderation when Access 1 units are being used to contribute to an Access 2 unit.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, 2001).

## National Unit Specification: general information

**UNIT** Monitoring and Maintaining an Environmental Area:  
Monitoring (Access 1)

**NUMBER** D93M 07

### **SUMMARY**

This unit offers candidates an opportunity to become more familiar with the main plant and animal life in a chosen environmental area.

### **OUTCOME**

Observe and monitor a chosen environmental area.

### **RECOMMENDED ENTRY**

Entry is at the discretion of the centre.

### **CREDIT VALUE**

1 credit at Access 1 (6 SCOTCAT points\*) at SCQF level 1.

\*SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

## **National Unit Specification: statement of standards**

### **UNIT**      Monitoring and Maintaining an Environmental Area: Monitoring (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

#### **OUTCOME**

Observe and monitor a chosen environmental area.

#### **Performance criteria**

- a)      The main plants in the chosen area are identified correctly.
- b)      The main animals/mini-beasts in the chosen area are identified correctly.
- c)      A simple record of the plants and animals identified in the chosen environmental area is kept.

#### **Evidence requirements**

The candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal and may include one or more of the following: speech, writing, word-processing, signing, lip-reading, Braille or computer-assisted communication.

PCs (a) and (b) Evidence of the correct identification of at least five plants and three animals or mini-beasts.

PC (c)      Evidence of a simple record/log of the plants and animals identified.

## **National Unit Specification: support notes**

### **UNIT        Monitoring and Maintaining an Environmental Area: Monitoring (Access 1)**

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of two units derived from the Managing Environmental Resources Unit D555 08 Monitoring and Maintaining an Environmental Area (Access 2). Candidates may find this an appropriate unit to undertake on its own or in conjunction with the other Access 1 Unit D93N 07 Monitoring and Maintaining an Environmental Area: Maintaining.

This unit offers candidates the opportunity to monitor the main plant and animal life in a chosen environmental area.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

This unit is practical in nature. Candidates are required to keep a simple record of monitoring the area. This might be undertaken in a group context with each candidate making his/her own record following group discussions. This record might be kept in a number of forms, for example, drawings and photographs can be incorporated with texts. It is not necessary for the candidate to personally record the test, this may be done by the teacher/lecturer or other responsible person.

The area may be indoors or outdoors, for example, containers with plants for classroom/centre window boxes, hanging baskets, bottle gardens, herbs, flower tubs, growbag gardens, centre grounds, wildlife garden, grounds of local community centre or local householder's garden.

The candidates should participate in discussing possibilities and selecting an appropriate area. They should discuss simple survey methods and carry out a simple survey in order to identify the plants and animals on the chosen site. Relevant information should be included in the record kept by the candidate.

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The observations made by staff and the responses of candidates should enable evidence to be gathered that the candidate has:

- observed the site over some time and has noticed the plants and animals in the area, for example, the candidate notices that birds come to pick up worms
- identified at least five plants and three animals or mini beasts, for example, the candidate has used simple pictorial keys
- kept a record of the plants and animals identified, the date they were identified and a note of any interesting points about them

It is not necessary for the candidate personally to record evidence. This may be done by the teacher/lecturer or other responsible person. In this situation, this person should authenticate the record by signing and dating a statement that it is an accurate record of the work of the named candidate.

## **National Unit Specification: support notes (cont)**

**UNIT**      Monitoring and Maintaining an Environmental Area: Monitoring  
(Access 1)

Records of the candidate's evidence should be retained for moderation purposes.

### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).

## National Unit Specification: general information

**UNIT** Monitoring and Maintaining an Environmental Area:  
Maintaining (Access 1)

**NUMBER** D93N 07

### SUMMARY

This unit offers candidates an opportunity to become familiar with maintaining a chosen environmental area over a period of time.

### OUTCOME

Maintain the chosen environmental area over a period of time.

### RECOMMENDED ENTRY

Entry is at the discretion of the centre.

### CREDIT VALUE

1 credit at Access 1 (6 SCOTCAT points\*) at SCQF level 1.

\*SCOTCAT points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCOTCAT points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.

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### Administrative Information

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## **National Unit Specification: statement of standards**

### **UNIT**        Monitoring and Maintaining an Environmental Area: Maintaining (Access 1)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to the Scottish Qualifications Authority.

### **OUTCOME**

Maintain the chosen environmental area over a period of time.

### **Performance criteria**

- a) Maintenance tasks required are identified correctly.
- b) Correct tools for the particular maintenance tasks are selected.
- c) Maintenance tasks are correctly carried out.
- d) A simple record of the maintenance tasks performed is kept.

### **Evidence requirements**

The candidate should be allowed to provide evidence using his or her normal mode of communication which may be verbal or non-verbal, and may include one or more of the following: speech, writing, word-processing, signing, lip-reading, Braille or computer-assisted communication.

- PC (a) Evidence of a list of tasks to be undertaken.
- PCs (b) and (c) Performance evidence of the candidate's ability to select tools correctly and carry out maintenance work.
- PC (d) Written evidence of a simple record/log.

## National Unit Specification: support notes

### UNIT        Monitoring and Maintaining an Environmental Area: Maintaining (Access 1)

This part of the unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

#### **GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT**

This is one of two units derived from the Managing Environmental Resources Unit D555 08 Monitoring and Maintaining an Environmental Area (Access 2). Candidates may find this an appropriate unit to undertake on its own or in conjunction with the other Access 1 Unit D93M 07 Monitoring and Maintaining an Environmental Area: Monitoring.

This unit offers candidates the opportunity to maintain the main plant and animal life in a chosen environmental area. The area may be indoors or outdoors, for example, containers with plants for classroom/centre window boxes, hanging baskets, bottle gardens, herbs, flower tubs, growbag gardens, centre grounds, wildlife gardens, grounds of local community centre or local householder's garden.

#### **GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT**

This unit is practical in nature. Candidates are required to keep a simple record of maintaining the area. This might be undertaken in a group context with each candidate making his/her own record following group discussions. This record might be kept in a number of forms. For example, drawings and photographs can be incorporated with texts. It is not necessary for the candidate to personally record the text, this can be done by the teacher/lecturer or other responsible person.

Candidates should be involved in normal day-to-day duties involved in maintaining the cleanliness, tidiness and safety of the environmental area as appropriate, for example, removal of litter may be one of the main activities.

#### **GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT**

The observation made by staff and the responses of candidates should enable evidence to be gathered that the candidate has:

- identified the necessary maintenance tasks, for example, the candidate knows that weeding has to be done on a regular basis
- selected the appropriate tools, for example, the candidate chooses a stiff brush for sweeping paths
- carried out the tasks satisfactorily
- kept a simple record of the tasks undertaken, for example, the group may take photographs of the site before and after they have picked up litter
- made evaluative comments on the activity. For example:
  - reasons for success or otherwise of the area such as regularity of maintenance tasks
  - suggestions such as changing from flowers to shrubs to lessen maintenance required
  - appreciating the effects of factors such as colours, scent etc on users of the area
  - realising the need to inform others of the purposes of the area to gain their co-operation

## **National Unit Specification: support notes (cont)**

### **UNIT**      Monitoring and Maintaining an Environmental Area: Maintaining (Access 1)

It is not necessary for the candidate personally to record evidence. This may be done by the teacher/lecturer or other responsible person. In this situation, this person should authenticate the record by signing and dating a statement that it is an accurate record of the work of the named candidate.

Records of the candidate's evidence should be retained for moderation purposes.

#### **SPECIAL NEEDS**

This unit specification is intended to ensure that there are no artificial barriers to learning or assessment. Special needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative outcomes for units. For information on these, please refer to the SQA document *Guidance on Special Assessment Arrangements* (SQA, publication code AA0645).