



## National Unit specification: general information

**Unit title:** Build and Repair Drystone Dykes (SCQF level 4)

**Unit code:** H1X5 10

**Superclass:** SL

**Publication date:** July 2012

**Source:** Scottish Qualifications Authority

**Version:** 01

## Summary

This Unit is aimed at beginners and novices and is ideal for discovering the various styles of drystone dyke and different dyking methods adopted throughout the UK.

Candidates will learn about the materials involved, how to use appropriate tools and assist in building a dyke under supervised conditions. This is an optional Unit in the National Certificate in Introduction to Horticulture at SCQF level 4. It is also suitable for use as a freestanding Unit.

## Outcomes

- 1 Describe key features, materials, tools and equipment used in drystone dyking.
- 2 Assist in preparing a section of drystone dyke for building.
- 3 Assist in the building of a section of drystone dyke.

## Recommended entry

Entry is at the discretion of the centre. There are no pre-entry requirements for this Unit.

## Credit points and level

1 National Unit credit(s) at SCQF level 4: (6 SCQF credit points at SCQF level 4)

*\*SCQF credit 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 SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

## **General information (cont)**

**Unit title:** Build and Repair Drystone Dykes (SCQF level 4)

### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

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

**Unit title:** Build and Repair Drystone Dykes: (SCQF level 4)

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 SQA. All practical activity must be carried out in accordance with current health and safety legislation including wearing Personal Protective Equipment (PPE) when necessary.

### **Outcome 1**

Describe key features, materials, tools and equipment used in drystone dyking.

#### **Performance Criteria**

- (a) Describe the key features and materials used in drystone dyking.
- (b) Identify Personal Protective Equipment (PPE), tools and equipment used in drystone dyking.

### **Outcome 2**

Assist in preparing a section of drystone dyke for building.

#### **Performance Criteria**

- (a) Assist in dismantling an existing dyke.
- (b) Grade, group and set aside stone for building.
- (c) Assist in preparing the dyke foundation.
- (d) Assist in setting the dyking lines.

### **Outcome 3**

Assist in the building of a section of drystone dyke.

#### **Performance Criteria**

- (a) Assist in selecting and building stones correctly according to dyke style and purpose.
- (b) Assist in laying stones level in the dyke, ensuring correctly pinned.
- (c) Ensure correct break jointing and hearting for each course.
- (d) Assist in ensuring the line and batter is maintained throughout the construction of the dyke.
- (e) Position and place copestones correctly and leave site tidy on completion.

## **National Unit specification: statement of standards (cont)**

**Unit title:** Build and Repair Drystone Dykes: An Introduction  
(SCQF level 4)

### **Evidence Requirements for this Unit**

All evidence for all Outcomes will be generated under supervised, open-book conditions.

Candidates must have access to existing dykes which require attention and repair and where there is adequate scope for groups of novice drystone dykers to assist safely and effectively in the repair and construction of dykes. A competent instructor must be present. Safe working practices need to be stressed particularly when lifting very heavy stones and breaking stones with a hammer. Danger to eyes, fingers and legs needs emphasis and safety goggles must be available.

Candidates will be shown how to work safely and they must wear appropriate Personal Protective Equipment (PPE).

For Outcome 1 Written and/or recorded oral evidence is required to demonstrate that candidates have achieved all Performance Criteria.

Candidates must describe accurately:

- ◆ at least four key features associated with drystone dyking
- ◆ at least two different types of material used for drystone dyking
- ◆ at least four tools or equipment used in drystone dyking
- ◆ at least two items of personal protective clothing used in drystone dyking

For Outcomes 2 and 3 performance and product evidence is required to demonstrate that candidates have achieved all Performance Criteria. Candidates must assist in preparing and building a drystone dyke under supervision by:

- ◆ dismantling a section of dyke
- ◆ grading/grouping and setting aside stone for rebuilding
- ◆ preparing the dyke foundation
- ◆ setting the dyking lines
- ◆ selecting and building stones correctly according to dyke style and purpose
- ◆ laying stones level in the dyke; ensuring correctly pinned
- ◆ ensuring throughbands are in correct positions
- ◆ ensuring correct break jointing and hearting for each course
- ◆ ensuring the line and batter is maintained throughout the construction of the dyke
- ◆ positioning and placing copestones correctly and leaving site tidy on completion

## National Unit specification: support notes

**Unit title:** Build and Repair Drystone Dykes: (SCQF level 4)

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 Unit is aligned to the following LANTRA National Occupational Standards (NOS):

CU1 Maintain Safe and Effective Working Practices  
CU8 Transport Supplies of Physical Resources within the Work Area  
CU16 Assist with Maintaining Structures and Surfaces

The candidate should achieve the level of someone, who competently assists in:

- ◆ dismantling a section of dyke
- ◆ grading; grouping and setting aside stone for rebuilding
- ◆ preparing a dyke foundation to setting the dyking lines
- ◆ selecting and building stones correctly according to dyke style and purpose
- ◆ laying stones level in the dyke; ensuring correctly pinned
- ◆ ensuring correct break jointing and hearting for each course
- ◆ ensuring the line and batter is maintained throughout the construction of the dyke
- ◆ positioning and placing copestones correctly and leaving site tidy on completion

This is an introductory Unit in which candidates are only required to assist in repairing a drystone dyke.

Candidates must have access to existing dykes which require attention and repair and where there is adequate scope for groups of novice drystone dykers to assist safely and effectively in the repair and construction of dykes. Candidates should be taken on visits to view different types of dyke in different situations.

A competent instructor must be present. Safe working practices need to be stressed particularly when lifting very heavy stones and breaking stones with a hammer. Danger to eyes, fingers and legs needs emphasis and safety goggles should be available.

Candidates should be shown how to work safely and they should wear appropriate Personal Protective Equipment (PPE).

## National Unit specification: support notes (cont)

**Unit title:** Build and Repair Drystone Dykes: (SCQF level 4)

### Outcome 1

The following lists of materials; tools and equipment should be covered and where appropriate uses and descriptions should be requested:

#### Features

- ◆ Foundation
- ◆ 'Double'
- ◆ Throughbands
- ◆ Capstones/copestones/copes
- ◆ Heartning/packing
- ◆ Wedges and chocks
- ◆ Coverstones
- ◆ Coursing line/coursing
- ◆ Batter
- ◆ Pinning
- ◆ Corner features/Cornish hedge/stone styles
- ◆ Bolt holes/cripple holes/smoots

#### Materials

- ◆ Sizes of stone
- ◆ Types of stone — field /quarried
- ◆ Grades of stone

#### Personal Protective Equipment

- ◆ Safety boots
- ◆ Goggles
- ◆ Gloves
- ◆ Clothing

#### Tools

- ◆ Line
- ◆ Line pole
- ◆ An **A** batter frame or profile
- ◆ Pick
- ◆ Tape measure
- ◆ Pinch bar
- ◆ Shovel
- ◆ Spade
- ◆ Dyking hammer
- ◆ Heavy hammer or sledge hammer.

## National Unit specification: support notes (cont)

**Unit title:** Build and Repair Drystone Dykes: (SCQF level 4)

**Outcome 1** could be partially covered on site, or on site visits during which the different dyke styles; features and components can be described and explained to candidates. Labelled diagrams and worksheets would be helpful to the candidates. Candidates will become familiar with the tools and equipment through use and during instruction.

### Outcomes 2 and 3

Copestones, coverstones and throughbands should be sited in a line well back from the base of the dyke. Packing and building stones should be assembled in separate piles, the former nearer to the dyke base but with sufficient foot room left for safe working, on both sides of the wall. Foundation stones should be laid immediately to the side of the trench. Guidance needs to be given as to when to take out large, troublesome foundation stones and when they may be left in situ.

Lines should reflect the existing line of the dyke and edges should be cleared of old grass or turf which may deflect the true line. Additional stone should be available where there is deterioration of stone.

Building is best accomplished by coursing rather than random, and candidates should be encouraged to build both sides to approximately the same level and pack the middle thoroughly before proceeding to the next course. Lines should be used throughout and stones laid to but not touching the line. Many walls do not have throughbands and guidance needs to be given as to how to use two parallel part lengths.

Particular attention should be paid to copes regarding size, suitability, positioning and the use of a line to ensure a regular top.

The site should be left tidy and any additional stone either heaped or loaded on to a trailer for removal.

## Guidance on learning and teaching approaches for this Unit

Most of this Unit will be carried out in a practical outdoor location, with candidates carrying out the procedures outlined in the Outcomes. In the first instance it would be beneficial for the candidates to work collectively and in pairs under direct guidance from the tutor/trainer who will demonstrate each stage of the work.

Candidates can then proceed to work individually and on independent sections of dyke under the supervision of the tutor/trainer who will correct any errors or faults which have not been overcome, during the teaching/training stage.

Throughout the building stages candidates should be taught to continually use lines and where necessary line poles or an **A** batter frame in order to preserve the line and bias of the section relative to the rest of the dyke.

Some variation in the type of building stone is advisable since differing types of stone have characteristics which require adaptation of building style. In the case of very old dykes with excessive crumbling of stone, additional stone will need to be supplied to make good the quantity of stone required.

## National Unit specification: support notes (cont)

### Unit title: Build and Repair Drystone Dykes: (SCQF level 4)

Any remaining stone should be tidily gathered into heaps at the conclusion of the building.

By adopting the above learning and teaching approaches and through the Outcomes and corresponding Evidence Requirements, the Unit should provide candidates with an opportunity to develop the following essential skills for life, learning and work:

Employability skills — the Unit could provide opportunities in this regard if the candidates are introduced to employers and have employer expectations with regard to dyke reconstruction explained to them.

Citizenship — the Unit could provide opportunities to demonstrate citizenship skills if the candidates were involved in a community project to repair a damaged dyke.

Sustainability — the Unit could develop skills in sustainable development as candidates will be developing skills which can be applied in maintaining our historical and cultural heritage.

### Guidance on approaches to assessment for this Unit

Outcome 1 — Labelling of diagrams and the use of matching exercises would be an appropriate way to assess Outcome 1.

Outcomes 2 and 3 - Should be assessed in a practical situation and ideally where an existing dyke requires attention and extending; however a new dyke would offer an equally suitable experience. Where a dyke already exists; this helps to reduce the costs involved and natural scope to repair, as well as rebuild and extend the dyke.

Candidates will be assessed on their ability to build and repair a drystone dyke, but they will work as part of a team, or in pairs, etc.

The assessments should be carried out with the aid of observation checklists. Satisfactory achievement of Outcomes 2 and 3 is based on all of the Performance Criteria being met for both Outcomes.

### Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.



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

**Unit title:** Build and Repair Drystone Dykes: (SCQF level 4)

### **Opportunities for developing Core Skills**

In this Unit candidates will be required to strip down and rebuild a section of drystone dyke.

Candidates will:

- ◆ describe features, materials and tools used in drystone dyking
- ◆ assist in the dismantling and construction of a drystone dyke under supervision

This means that as candidates are doing this they will be developing aspects of the Core Skills of *Communication*, *Problem Solving* and *Working with Others*.

In addition candidates may develop aspects of the Core Skill of Numeracy through using accurate measurements and have opportunity to develop skills in using numbers. Learners will be carrying out basic calculations on an area of dyke; volume; density; weight; estimation of time it will take and costings.

### **Disabled candidates and/or those with additional support needs**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements)

## History of changes to Unit

Version	Description of change	Date

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