



National Unit specification: general information

Unit title: Practical Conservation: Habitat Management in Scotland (SCQF level 5)

Unit code: FV5H 11

Superclass: QA

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Source: Scottish Qualifications Authority

Version: 02

Summary

This Unit will provide candidates with an introduction to habitats of Scotland which are important for nature conservation. Candidates will be introduced to a wide range of practical habitat management techniques that are used in the enhancement, protection and conservation of these habitats. On completion of this Unit candidates will have gained practical experience of carrying out habitat management tasks for a number of habitat types and understand why these techniques are used.

This Unit is suitable for anyone wishing to gain experience and understanding of practical habitat management.

This Unit is a mandatory Unit in the National Certificate in *Countryside Management* (SCQF Level 5), but is also available for candidates wishing to study the Unit on its own.

Outcomes

- 1 Identify habitat types occurring in Scotland and describe their conservation value.
- 2 Identify habitat features managed for conservation and describe practical techniques used.
- 3 Carry out a range of practical habitat management tasks.

Recommended entry

While entry is at the discretion of the centre, some prior experience of working outdoors and working with tools would be beneficial for candidates.

National Unit specification: general information (cont)

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Credit points and level

1 National Unit credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**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.*

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Practical Conservation: Habitat Management in Scotland
(SCQF level 5)

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.

Outcome 1

Identify habitat types occurring in Scotland and describe their conservation value.

Performance Criteria

- (a) Identify a range of habitat types occurring in Scotland.
- (b) Identify the main characteristics of a range of habitats occurring in Scotland.
- (c) Describe the conservation value of a range of habitats occurring in Scotland.

Outcome 2

Identify habitat features managed for conservation and describe practical techniques used.

Performance Criteria

- (a) Identify site conditions which are managed for conservation purposes.
- (b) Identify vegetation managed for conservation purposes.
- (c) Describe practical techniques used to manage habitats in Scotland.

Outcome 3

Carry out a range of practical habitat management tasks.

Performance Criteria

- (a) Identify common hazards and assess risks on site.
- (b) Select tools, materials and equipment appropriate to tasks undertaken
- (c) Carry out all tasks safely and in line with best practice.
- (d) Carry out all tasks in ways which do not damage the site.
- (e) Deal with waste material appropriately for the site.

National Unit specification: statement of standards (cont)

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Evidence Requirements for this Unit

Evidence is required to demonstrate that all Outcomes and Performance Criteria have been met.

Written and/or oral and performance evidence is required for this Unit.

Outcome 1

This is an open-book assessment and evidence for this Outcome will be written and/or oral and will include:

- ◆ an identification of three different habitat types found in Scotland
- ◆ an identification of the main characteristics of three habitat types found in Scotland which must include:
 - dominant vegetation types
 - common fauna
 - topography
 - drainage status
- ◆ a description of the conservation value of three habitat types found in Scotland

Outcome 2

This is an open-book assessment and evidence for this Outcome will be written and/or oral and will include:

- ◆ an identification of site conditions managed for conservation which must include:
 - water levels
 - soil conditions
 - pollution
 - impact of public access
- ◆ an identification of vegetation managed for conservation which must include:
 - woody
 - non-woody
- ◆ a description of a minimum of three practical techniques used to manage habitats in Scotland

National Unit specification: statement of standards (cont)

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Outcome 3

Performance evidence will be recorded for work carried out in relation to three different habitat types.

Candidates must provide performance evidence which includes:

- ◆ identification of common hazards and the assessment of risks on work sites
- ◆ selection of correct tools, materials and equipment appropriate to tasks undertaken
- ◆ carrying out all tasks safely and in line with best practice which must include:
 - using tools, materials and equipment safely
 - maintaining a clear and safe work site at all times
 - following best practice
- ◆ carrying out all tasks in ways which do not damage the site
- ◆ dealing with waste material appropriately for the site

National Unit specification: support notes

Unit title: Practical Conservation: Habitat Management in Scotland (SCQF level 5)

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):

- ◆ CU2 Monitor and Maintain Health and Safety
- ◆ CU4 Maintain Environmental Good Practice at Work
- ◆ CU86 Establish Habitats
- ◆ CU87 Carry Out Habitat Management Work
- ◆ CU88 Manage Habitats

This Unit will provide candidates with a broad overview of the diverse range of habitat types which occur in Scotland and some of the practical work and techniques which are used in their protection.

Candidates should be introduced to the concept of habitat and the importance of maintaining and enhancing habitats for conservation purposes, reasons such as: maintaining and enhancing populations of rare species; maintaining and enhancing rare habitat types; maintaining and enhancing biodiversity and maintaining and enhancing habitat diversity. Some of the common threats faced by habitats could be considered and ways in which the impacts of these can be minimised explored. Threats could include building development, pollution, impacts of access such as erosion and disturbance, changing land-uses and reducing water-levels in wetland habitats.

Common features of habitats should include dominant vegetation types (and where appropriate species), fauna commonly associated with identified habitats and abiotic influences such as topography and drainage status/ground conditions.

When discussing the conservation value of habitats consideration should be given to the species of flora and fauna which depend on them, the rarity of individual species, the rarity of the habitat itself, the susceptibility of the habitat to external influences (eg its fragility) should also be covered as a reason why habitats might face degradation. Human impacts should also be explored, such as pollution, development, harvesting (eg wood), disturbance, erosion and the destruction of linking corridors to other areas of similar habitat. These threats often impact directly on site conditions such as water levels, soil conditions (eg pH and drainage status), litter and other pollution present and the provision of access, leading to a requirement to directly manage site conditions through intervention. Candidates will also gain an understanding of the need to manage different types of vegetation (both woody and non-woody) for habitat management such as controlling invasive species such as Himalayan balsam and Japanese Knotweed, or the removal of non-native tree species from a woodland to promote the development of a native woodland area and improve its inherent biodiversity.

National Unit specification: support notes (cont)

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Instruction/training must be provided to candidates for all practical tasks that they undertake. It is important to ensure that best practice is promoted at all times and that candidates are aware of the reasons for undertaking any works that they carry out. Practical activities could be supported by appropriate handouts which allow candidates to study and better understand practical techniques whilst away from the work site. Health and safety must be paramount throughout all practical activities and opportunities to introduce basic risk assessment should be promoted.

Practical techniques and tasks undertaken in the practical elements of this Unit might include:

- ◆ felling
- ◆ coppicing
- ◆ uprooting
- ◆ thinning
- ◆ pruning
- ◆ hedge laying
- ◆ cutting or mowing
- ◆ mulching
- ◆ planting
- ◆ sowing
- ◆ encouraging natural regeneration
- ◆ providing protection
- ◆ drainage works
- ◆ access works
- ◆ boundary works

Guidance on learning and teaching approaches for this Unit

Although this is intended to be a largely practical based Unit, some classroom based learning would be an appropriate way to introduce candidates to the variety of habitat types which exist in Scotland and the main characteristics of some of those found in the local area of study. An introduction to the range of habitat features which are managed for conservation purposes could also be introduced in the classroom and tutor led discussions used to explore potential, practical approaches to management. Candidates should be encouraged to reflect on their own experiences of the countryside and different habitats that they have encountered and any practical activities they may have had prior experience in.

Initial learning should be reinforced by site visits and practical participation in habitat management projects and tasks which will enable candidates to develop a better understanding of the taught theory and also develop an understanding of and level of experience in a range of practical skills which are required for practical habitat management. Where possible practical projects should be sought which allow candidates the opportunity to develop skills in a range of practical habitat management tasks, in a range of habitat types. Clear demonstrations and instruction should be given in relation to all habitat management tasks as well as instruction in the safe use of tools and working in what can be diverse conditions across a single site.

National Unit specification: support notes (cont)

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Guidance on approaches to assessment for this Unit

In relation to Outcomes 1 and 2, candidates could produce a log book which details the habitat types where practical habitat management work is carried out, the conservation value of these sites, the site conditions and vegetation types that were managed and the practical techniques used to manage them. There could be a standard format used for this log book.

Performance evidence in relation to Outcome 3 will be recorded by assessors during observation of candidates carrying out practical habitat management tasks. This could be on an observation checklist for practical tasks and will be carried out in a minimum of three different habitat types.

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 e-checklists. 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)*.

Opportunities for developing Core Skills

Through the diverse activities required in the delivery and assessment of this Unit there will be opportunities for candidates to develop their Core Skills in *Working with Others, Problem Solving* and *Communication*.

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

History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 5 embedded.	29/09/2011

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