



## Higher National Unit Specification

### General information for centres

**Unit title:** Conservation Skills

**Unit code:** F431 34

**Unit purpose:** The Unit seeks to broaden the view of activities that the phrase ‘conservation skills’ covers and develops an understanding of the many different situations in which these skills are needed. This Unit is intended to provide a broad overview of the range of practical conservation skills which are required within the sector to achieve a wide range of conservation objectives. This Unit highlights traditional conservation skills, often viewed as the construction and maintenance skills, but also introduces many other practical conservation skills such as a range of survey techniques, the interpersonal skills necessary to successfully facilitate community projects and the overall requirement of project management skills.

On completion of the Unit the candidate should be able to:

- 1 Describe a range of conservation skills.
- 2 Plan and contribute to a small scale conservation project.
- 3 Evaluate a small scale conservation project.

**Credit points and level:** 1HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7\*)

*\*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.*

**Recommended prior knowledge and skills:** There is no recommended prior knowledge or skills required for undertaking this Unit.

**Core Skills:** There are opportunities to develop the Core Skills of *Communications*, *Problem Solving*, and *Working with Others* at SCQF level 6, although there is no automatic certification of Core Skills or Core Skills components.

**Context for delivery:** If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

**Assessment:** This Unit could be assessed by two instruments of assessment, a set of restricted response questions to assess Outcome 1, and a project to assess Outcomes 2 and 3.

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

**Unit title:** Conservation Skills

**Unit code:** F431 34

The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

### **Outcome 1**

Describe a range of conservation skills

#### **Knowledge and/or Skills**

- ◆ Habitat management techniques
- ◆ Construction tasks
- ◆ Maintenance tasks
- ◆ Environmental surveying
- ◆ Community and stakeholder groups
- ◆ Interpersonal skills

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ describe a habitat management technique and identify where it might be appropriately used
- ◆ describe a construction task used for conservation purposes identifying where it might be used and giving specification and construction details
- ◆ describe a maintenance task for a different construction feature
- ◆ describe one environmental surveying technique used for conservation purposes and where it might be used
- ◆ describe two interpersonal skills required to work effectively with a selected community group and a selected stakeholder group for conservation purposes
- ◆ describe a sources of funding for a conservation project

This is an open-book assessment using restricted response questions covering all Evidence Requirements.

#### **Assessment Guidelines**

This Outcome could be assessed by a series of six restricted response questions one covering each Evidence Requirement.

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

**Unit title:** Conservation Skills

### Outcome 2

Plan and contribute to a small scale conservation project

#### Knowledge and/or Skills

- ◆ Project Planning
- ◆ Skills audit
- ◆ Material and resource requirements
- ◆ Project costing and funding sources
- ◆ Project tasks
- ◆ Risk assessment

#### Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ produce a project planning document for a small scale conservation project which includes the following details:
  - skills audit of the group
  - material and resource requirements
  - project costing
  - timeline
  - possible funding sources
  - an identification of the candidate's task in the project
  - a risk assessment
- ◆ contribute to a small scale conservation project by undertaking an identified project task. It is expected that the candidate will undertake either a construction, maintenance or survey project task. Evidence of the practical task will be recorded by the lecturer on a candidate checklist, with further detail provided by the candidate in the form of a project planning document.

This is an open-book assessment.

#### Assessment Guidelines

This Outcome could be assessed in conjunction with Outcome 3 of this Unit. This assessment could take the form of a project which requires candidates to identify, plan and contribute to a small scale conservation project. This process might then be recorded and evaluated in the form of a report. Observation of the task will be required to ensure that the candidate undertakes their identified task in an appropriate manner.

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

**Unit title:** Conservation Skills

### **Outcome 3**

Reflect on the Outcome of a small scale conservation project

#### **Knowledge and/or Skills**

- ◆ Reflection
- ◆ Conclusions
- ◆ Improvement strategies

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that for a project they have contributed to they can:

- ◆ in relation to the overall project plan aims, provide a short evaluation of the success or otherwise of the final Outcome of the project
- ◆ for the project contributed to, develop four realistic proposals for improvement; at least one of which must be related to the individual's project management skills

#### **Assessment Guidelines**

This Outcome could be assessed in conjunction with Outcome 2 of this Unit. This assessment could take the form of a practical project which requires candidates to, plan, contribute to and reflect on a small scale conservation project. This process might then be recorded in the form of a report.

## Administrative Information

**Unit code:** F431 34  
**Unit title:** Conservation Skills  
**Superclass category:** QA  
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### History of Changes:

Version	Description of change	Date

**Source:** SQA

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## Higher National Unit specification: support notes

### Unit title: Conservation Skills

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 intended to provide a broad overview of the range of practical conservation skills which are required within the sector to achieve a wide range of conservation objectives. Practical conservation skills may often be viewed as the construction and maintenance skills for structures such as footpaths, boundaries and ancillary structures, as well as the application of vegetation management techniques. This Unit seeks to explore this traditional range of skills, but also to highlight the many other practical conservation skills, such as a range of survey techniques, the interpersonal skills necessary to successfully facilitate community projects and the overall requirement of project management skills. Further to developing a greater awareness of the range of conservation skills, this Unit will provide candidates with the opportunity to take part in the planning and delivery of a small scale conservation project providing experience that will help to develop some of the conservation skills discussed in Outcome 1.

#### Outcome 1

Further to developing an understanding of the range of conservation skills, it is important for candidates to be able to evaluate not only the effectiveness of work undertaken, but also the process followed to progress from project planning stages through to project completion. The content of this Unit could be vast and candidates should be exposed to as wide a range of conservation skills as possible through the delivery of Outcome 1. Skills covered might be drawn from, for example:

*Habitat Management techniques:* vegetation management — woody and non-woody vegetation, coppicing, tree felling, hedgelaying, tree planting, wildflower meadow management, maintenance of soil conditions and water levels.

*Construction and Maintenance tasks:* boundaries, fences and drystone dykes, and associated structures such as gates, stiles, seats, lunky holes and smoots. Specifications for different styles of dykes and fences could be explored and potential regional variations highlighted.

*Footpaths* — upland and lowland, and associated structures such as steps, drainage, bridges, fords, waymarkers, boardwalks, stiles, gates, revetments. Again it might be beneficial to explore a number of specifications for both formal and informal footpaths.

*Environmental surveying:* habitats, species, footpath routes, pollution, landscape assessment, Environmental Impact Assessment (EIAs).

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

### Unit title: Conservation Skills

*Working with communities* — working with volunteers; interpersonal skills (supporting and encouraging others; providing and receiving constructive criticism; negotiation; listening; oral communication); making grant applications, identifying suitable sources of funding, (eg local authority small environmental grants, SNH, environmental trusts). Candidates should be aware of the many sources of funding which are available for conservation projects and they should also be familiar with timelines when funding is available and the changing landscape of grant in aid schemes. It is important that candidates are aware of the uses of both hand tools and power tools in undertaking practical conservation activities. Discussions could focus on the pros and cons of each and situations where each may be preferred; the levels of competence and health and safety issues relating to the use of tools should also be addressed.

#### Outcome 2

This Outcome seeks to provide candidates with some experience of being involved with a small scaled conservation project. Although the scope of this Unit is not sufficient to train candidates in all aspects of practical conservation work, this Outcome seeks to provide the opportunity to develop a clearer understanding of the process involved in project work, and also the opportunity to develop some new skills through contributing to this process. Tutor guidance will be necessary to ensure that candidates select appropriate and achievable projects to contribute to. However, candidates should be encouraged to identify a suitable project themselves and group work would be suggested for this Outcome. The planning of the project should involve a discussion of suitable objective(s) for the project and the different ways these could be achieved. It is important for candidates to be involved in group discussions and that all contribute to these, candidates could be offered the opportunity to act as chairperson during these discussions and agreement within the group must be reached.

It would be useful for candidates to undertake a skills audit of those involved in their small scale conservation project as this will provide the group with a starting point from which to best allocate project tasks appropriately. It is quite likely that as the project progresses, these task allocations have to be revisited and potentially reallocated as the groups' working interactions develop. It would be expected that candidates identify the tools and materials required for the project and provide realistic costings. Candidates should be able to suggest suitable funding sources to support the project they are working towards. The final part of this Outcome should involve the candidates in physically undertaking the work that they have been planning as a group.

#### Outcome 3

This section of the Unit allows candidates to reflect upon the process they have undertaken through Outcome 2 and evaluate all aspects of the project from inception through to its completion. This evaluation of the project should look at all aspects: the management of the discussions, the recording of these discussions and the conclusions drawn, the way by which decisions were made, how any tools and materials were identified, how suitable funding sources were identified, how project costings were calculated and how work throughout the project was allocated and carried out.

Candidates should be encouraged to be self-critical, but also to be aware if the project has gone well and to highlight both the good elements and those which could be improved upon. This reflective approach should be guided to enable candidates to make realistic proposals as to how improvements could be made to the project. These might cover improvements in the quality of the product, improvements in efficiency of work; cost reductions, improvements in the management of the project.

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

### Unit title: Conservation Skills

Overall this Unit sets out to introduce candidates, first hand to conservation projects and the skills and experience necessary to manage a project. It would be expected that through their reflections, candidates are able to be self-critical where necessary and provide solutions to any difficulties encountered. This experience should provide skills and understanding that could easily be applied to a wide range of projects, not just the specific one undertaken through the course of the Unit.

### Guidance on the delivery and assessment of this Unit

As part of a Group Award, knowledge to support this Unit can be drawn from a variety of Units including *Habitat Management*, *Ecological/Environmental Surveying*, *Understanding the Landscape*, *Ecology*, *Leadership of Countryside Activities*, *Countryside Recreation* and *Countryside Visitor Management*.

#### Outcome 1

The delivery of this part of the Unit would be enhanced by the use of site visits to look at conservation projects that have been undertaken and their effects on the site, as well as visiting sites which might benefit from conservation projects, providing candidates with opportunities to a look at sites and make proposals as to how they might benefit from the implementation of a conservation project. As outlined above, these proposals might entail practical site improvements through the construction of new structures or the maintenance of pre-existing ones, or surveying of the site for habitats, species, footpaths, landscape character, and potential for community involvement. Candidate research into the range of conservation skills and discussions of their findings could also be an approach which would be complimented by site visits. Assessment of this Outcome could be a series of short answer questions which ask candidates to identify a range of conservation skills and a range of settings in which these skills might be appropriately used.

#### Outcome 2

It is anticipated that this Outcome forms the bulk of this Unit and is candidate centred; the use of group work would aid the delivery of this Outcome. Understanding the need for project development and management skills is very important for candidates who are seeking employment in the conservation sector, where many jobs are supported by grant funding and relate specifically to large grant applications and related projects. By taking part in the planning and implementation of a small scale conservation project, candidates will be gaining not only a clear understanding of the requirements of running a project, but also some of the skills required to do this successfully. Depending on the conservation project to be undertaken by candidates, there could be opportunity to integrate LO2 with other areas of the Group Award such as Environmental Surveying and Habitat Management.

#### Outcome 3

The project report and evaluation required for this Outcome could be based on the project undertaken in Outcome 2 and integrated with the assessment. Candidates will have a working knowledge of the project and there will be continuity through the Unit. It is important for candidates to be encouraged to reflect on their own part within the project as well as the wider project itself.



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

### **Unit title:** Conservation Skills

A suitable assessment instrument for Outcomes 2 and 3 would be a practical project and report to record the planning, implementation and evaluation of the project and appropriate proposals for improvement.

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

There are opportunities to develop the Core Skills of *Communications* through the oral or written responses chosen for the assessment tasks, and the contribution to the planning tasks and engagement in the conservation project. *Problem Solving* is involved in the project planning task when identifying resources, setting out timelines and risk assessment. *Working with Others* is involved in both the collection of site specific information and the engagement in the conservation project.

### **Open learning**

It could be possible to deliver this Unit by distance or blended learning methods, including internet-based material and directed reading. Arrangements could be made for candidates to join in any field trips to visit selected conservation sites and arrangements agreed regarding the contribution to a conservation project which is part of the evidence required.

### **Candidates with disabilities and/or additional support needs**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* ([www.sqa.org.uk](http://www.sqa.org.uk)).

## General information for candidates

### Unit title: Conservation Skills

Employment opportunities within the environment and conservation sector are very varied and this Unit is designed to provide you with an overview of the range of conservation skills used to achieve a wide range of conservation objectives. It seeks to broaden your view of activities that the phrase 'conservation skills' covers and to develop an understanding of the many different situations in which these skills are needed. It will also introduce you to project management skills and reinforce these through planning and delivering a small scale conservation project.

Project management skills are very important within a wide range of employment opportunities and in studying this Unit you will gain an introduction to and understanding of these skills in a conservation setting. This Unit will allow you to draw on knowledge you have gained throughout the course of your studies.

After investigating a range of conservation skills and their application, you will be asked to plan and undertake a small scale conservation project as a group. Through this project you will be able to develop first hand experience of the way in which conservation projects are managed and the requirement for thorough planning and organisation before any work can be carried out. There will also be the opportunity to investigate the resource requirements of small scale conservation projects, where you might look for suitable sources of funding to support these activities.

Finally, you will be asked to report on the project you have been involved with and to reflect on the successes and failures of this in order to evaluate the exercise and provide proposals for improving such a project in the future.

There are opportunities to develop the Core Skills of *Communications*, *Problem Solving*, and *Working with Others* at SCQF level 6, although there is no automatic certification of Core Skills or Core Skills components.