



Higher National Unit specification

General information for centres

Unit title: Wildlife Management

Unit code: F2GB 34

Unit purpose: This Unit will allow the candidates to develop a knowledge and understanding of the principles and application of wildlife management and the restraints placed by legislation upon those involved in the management of wildlife.

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

- 1 Evaluate the impact of wildlife on management of a rural industry.
- 2 Evaluate measures for the management of wildlife in rural areas.
- 3 Explain the application of the principles of wildlife management.

Credit points and level: 1 HN 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 are no specialist prior knowledge and skills required to study this Unit.

Core Skills: There are opportunities to develop the Core Skills of *Communication, Information Technology, Working with Others* and the component *Critical Thinking* of the Core Skill of *Problem Solving* all at SCQF level 6 in this Unit, 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: Outcomes 1, 2 and 3 could be assessed by a single instrument of assessment, and would require the candidates to produce a report based on a specified study area or vocationally relevant scenarios. However this Unit could be assessed as three separate assessment events.

Higher National Unit specification: statement of standards

Unit title: Wildlife Management

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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

Evaluate the impact of wildlife on management of a rural industry

Knowledge and/or Skills

- ◆ Vertebrate species
- ◆ Vertebrate species behaviour
- ◆ Land use
- ◆ Rural industry

Evidence Requirements

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

- ◆ identify a minimum of six vertebrate species in an area of land
- ◆ evaluate how the behaviour of the vertebrate species may lead to differing approaches in wildlife management

Candidates' evaluations should reflect:

- ◆ land use of the selected rural industry
- ◆ behaviour of the vertebrate species
- ◆ impact of the species on the selected rural industry

Assessment Guidelines

Assessment of this Outcome could be combined with Outcomes 2 and 3 as part of a single assessment of the Unit, details of which are given under Outcome 3.

Alternatively, a separate assessment event using a report based on an area of land could be used for this Outcome. It is recommended that candidates select an area of land with which they are familiar and agree this selection with their assessor.

Higher National Unit specification: statement of standards (cont)

Unit title: Wildlife Management

Outcome 2

Evaluate measures for the management of wildlife in rural areas

Knowledge and/or Skills

- ◆ Management measures
- ◆ Effectiveness
- ◆ Legislative constraints

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can for a minimum of 6 vertebrate species for an area of land:

- ◆ select two potential measures to manage each of the species
- ◆ evaluate the effectiveness of each potential measure
- ◆ specify two legislative constraints associated with any of these potential measures

Assessment Guidelines

Assessment of this Outcome could be combined with Outcomes 1 and 3 as part of a single assessment of the Unit, details of which are given under Outcome 3.

Alternatively, a separate assessment event using a report based on an area of land could be used for this Outcome. It is recommended that candidates select an area of land with which they are familiar and agree this selection with their assessor.

Higher National Unit specification: statement of standards (cont)

Unit title: Wildlife Management

Outcome 3

Explain the application of the principles of wildlife management

Knowledge and/or Skills

- ◆ Government policy for biodiversity
- ◆ Statutory and non-statutory organisations
- ◆ Integrated management strategies

Evidence Requirements

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

- ◆ explain the organisations which provide support for biodiversity
- ◆ explain the support available for biodiversity
- ◆ relate one integrated management strategy to government policy for each of two species
- ◆ evaluate the effectiveness of one integrated management strategy for each of two species

Assessment Guidelines

Assessment of this Outcome could be combined with Outcomes 1 and 2 as part of a single assessment of the Unit. Evidence could be generated by submission of a folio covering the Evidence Requirements for all Outcomes, which may contain a report, illustrations and relevant published material.

Alternatively, a separate assessment event using a report based on an area of land could be used for this Outcome. In either case, it is recommended that candidates select an area of land with which they are familiar and agree this selection with their assessor.

Administrative Information

Unit code: F2GB 34
Unit title: Wildlife Management
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Higher National Unit specification: support notes

Unit title: Wildlife Management

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 will allow candidates to develop a knowledge and understanding of the principles and application of wildlife management and the restraints placed by legislation upon those involved in the management of wildlife. The Unit could also allow candidates to develop a knowledge and understanding of the restraints placed by legislation upon those managing wildlife populations.

It is suitable for delivery within the contexts of all land-based activities, and the emphasis in delivery could be with regard to the vocational group or groups being taught. The Unit intends to develop candidates' skills in the correct identification of areas where wildlife present in the area may conflict with the aims of the rural activity, such as the presence of 'pest' species on farms and nature reserves. The Unit could provide an understanding of the potential preventative or protective measures that could be adopted. Candidates could be encouraged to consider non-lethal methods of managing wildlife and be encouraged to develop identification skills for a range of bird and mammal species, though identification skills will not be specifically assessed in the delivery of the Unit. There could be clear direction to candidates to consider integrated measures to manage wildlife, rather than reliance upon a single method or system.

Emphasis may be placed on species prevalent in distinct geographic regions, while issues of national significance should not be ignored. Lectures and tutorials could be supported by practical classes and field visits, resource materials, preserved specimens and photographs. Visits to Linking Environment and Farming (LEAF) farms, where good integrated management is demonstrated, may be beneficial to candidates.

Outcome 1 could involve candidates in the identification of relevant species and the diversity of areas where both conflict and benefit may accrue from a single species, such as the potential problems of foxes on farms at lambing time and the value of foxes as predators of rabbits where burrowing and erosion damage to historical sites is significant. Examples can be drawn from a wide range of rural-based activities, such as arable farming, livestock farming, game management and vermin control in buildings and structures.

In **Outcome 2** candidates need to be aware of the range of natural factors that affect the size and occurrence of bird and mammal populations such as disease, parasites, predators, migration and available feeding resources. Candidates could be aware of the legal non-lethal and lethal methods of managing populations, placed into the context of the availability of alternative methods, less controversial methods and public opinion. The various legislative constraints placed on the use of methods to manage populations could be studied in relation to both general principles and specific situations and methods. Current legislation could be covered with respect to the use of methods to control or prevent damage or other conflict with "pest" and non-pest species. Candidates may be able to select appropriate legal methods to manage populations in specific situations.

Higher National Unit specification: support notes (cont)

Unit title: Wildlife Management

Outcome 3 could build upon the knowledge gained in Outcomes 1 and 2. Candidates could be able to produce a plan for a strategy that, where appropriate, will utilise more than one method of managing a population. This could be achieved through the appraisal of a range of potential options, including non-lethal and lethal methods. It may take due regard of personal, public, legal and environmental issues. Candidates could be aware of the various governmental and non-governmental bodies that are involved with the management of wildlife populations; this could include bodies such as SEERAD (Scottish Executive Environment and Rural Affairs Department), SNH (Scottish Natural Heritage), and wildlife and game charities such as the RSPB (Royal Society for the Protection of Birds), BASC (British Association for Shooting and Conservation) and FWAG (Farming and Wildlife Advisory Group). Candidates could be aware of government policy in relation to wildlife, such as CITES (Convention on International Trade in Endangered Species), the Partnership for Action Against Wildlife Crime and the funding of conservation schemes through payments eg the Land Management Contracts and Tier 3 of the Single Farm Payment Scheme. Where relevant, funding schemes which are closed to new applicants, but still running, could be included in the programme of study.

Guidance on the delivery and assessment of this Unit

This Unit is primarily designed to provide candidates with technical and professional knowledge related to occupations in agriculture and countryside management. It can be delivered as a free-standing Unit or as part of a Group Award. Candidates may need to relate information learnt in this Unit to the requirements of the Graded Unit.

When the Unit is delivered as part of a Group Award, it would be beneficial to deliver it after or in conjunction with complimentary Units (eg crop production and crop protection Units in Agriculture or Horticulture, habitat management and biodiversity conservation Units in Countryside and Environmental Management). In these circumstances, candidates would more easily appreciate the integration of the material. It could also allow the Unit to be delivered in such a way that enables candidates to appreciate its relevance to the vocational area concerned. Wherever possible, links could be drawn to situations that candidates understand, for example, rabbit control strategies on farms and predator control on areas where rare species breed.

Delivery could place emphasis on the legal aspects of population management. It could include a range of approaches from formal lectures to discussions and library sessions, giving access to relevant publications and appropriate web sites. Practical sessions could be carried out to view and where relevant, to handle equipment for the various methods available. Group tasks may be beneficial, such as a group being asked to collectively carry out research for a specific rural site.

Higher National Unit specification: support notes (cont)

Unit title: Wildlife Management

Opportunities for developing Core Skills

There are opportunities to develop the Core Skills of *Communication*, *Information Technology*, *Working with Others* and the component Critical Thinking of the Core Skill of *Problem Solving*, all at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

There are opportunities to develop the component Written Communication of the Core Skill of *Communication* at SCQF level 6 in this Unit. Candidates may complete written work for each Outcome, such as where evaluating the effectiveness of an integrated management strategy in Outcome 3.

Completing class work and fulfilling Evidence Requirements such as these allows for the use and development of the component's general skills, which at SCQF level 6 are the abilities to 'produce well structured written communication on complex topics' for its written element and to 'read and understand complex written communication' for the reading element. When completing such responses effectively, candidates will need to present essential ideas, information and supporting detail in a logical and effective order.

Additionally, there may be opportunities to develop the component Oral Communication at SCQF level 6 in the assessment of this Unit. Where candidates are involved in visits to rural sites they may develop the component's general skill; 'produce and respond to oral communication on a complex topic'. Candidates will be asked to convey essential information or ideas and respond to questions which ask them to discuss key wildlife management concepts. Candidates will also have an opportunity to evaluate and present a substantial body of information on wildlife management principles.

The Core Skill of *Working with Others* at SCQF level 6 could be developed within this Unit in particular in relation to any planned visits to rural sites. *Working with Others* involves the ability to work with others to plan, agree and take responsibility for tasks, to support co-operative working in appropriate ways, and to review the effectiveness of one's own contribution. This would fit with a group task to carry out research for a rural site. The general skill at SCQF level 6 is 'work with others in a group to analyse, plan and complete a complex activity'. Candidates can be encouraged to analyse the task and negotiate goals, roles and responsibilities, anticipating and responding to needs of others, supporting cooperative working and evaluating and drawing conclusions the effectiveness of one's own contribution. This Core Skill could be developed without formal certification.

There are opportunities for the candidate to develop the Core Skill of *Information Technology* at SCQF level 6 in this Unit. When candidates are involved in their own independent research practical work they will an opportunity to develop the general skill 'using an IT system independently to process a range of information'. Candidates may have to complete a number of internet searches to find information and keep their data secure and manage its storage.

The analysis of species in an area of land in Outcome 1 may allow candidates to develop the component Critical Thinking of the Core Skill of *Problem Solving* at SCQF level 6. Candidates will study an area of land and investigate the impact that a species has on it, and how this affects a rural industry. The general skill that candidates may have to complete is 'analyse a complex situation or issue'.

Higher National Unit specification: support notes (cont)

Unit title: Wildlife Management

Open learning

This Unit is suitable for open learning. However, centres may have to plan open learning candidates' attendance at any recommended visits to rural sites.

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).

General information for candidates

Unit title: Wildlife Management

This Unit is designed to support Units that you may study in Agriculture and Horticulture and Countryside and Environmental Management. You will gain technical and professional knowledge related to the management of wildlife populations, in particular, those bird and mammal species whose feeding or behavioural activities can conflict with the aims of rural activities such as farming or managing areas for wildlife.

The assessment may be in the form of a report to assess their knowledge and understanding of the reasons for carrying out population management measures, the constraints on these measures imposed by legislation and the need for integrated strategies. You will be encouraged to make your own decisions on which species to discuss in detail in the assessment. Where possible, you could describe species in situations with which you are familiar from the locality where you live or in relation to the career which you intend to pursue.

There are opportunities for you to develop the Core Skills of *Communication, Information Technology, Working with Others, Problem Solving* at SCQF level 6 in your study of this Unit, although you will not be given automatic certification of the Core Skills or Core Skills components.