



Higher National Unit specification

General information for centres

Unit title: Gamekeeping: Biodiversity for Wildlife Management

Unit code: DN8T 34

Unit purpose: This Unit is designed to provide candidates with the knowledge necessary to understand biodiversity and to appreciate the benefits of biodiversity. Candidates will examine how our actions influence the quality of biodiversity, and how game management practices can enhance it.

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

- 1 Explain the importance of biodiversity to wildlife management.
- 2 Describe the organisations and outline procedures that promote biodiversity.
- 3 Describe how game management practices can have a positive impact on biodiversity.

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: It would be beneficial for candidates to have studied biodiversity and/or nature conservation at Intermediate 2 or Higher level (SCQF levels 5 and 6). National Units relevant to this Unit include D83711 *Biodiversity in Scotland*.

Core Skills: There are opportunities to develop the Core Skill(s) of *Communication* at SCQF level 6 and *Problem Solving* and *IT* at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

The gathering together of data and the production of the assessment documents will involve *Communication* skills in reading, writing/talking and listening at Higher. The same process will also evidence *Problem Solving* and *Information Technology* at Intermediate 2. There are no significant opportunities to evidence *Numeracy* or *Working with Others*.

Context for delivery: This Unit forms part of the mandatory units of the HNC in Gamekeeping with Wildlife Management. It can also be used as a free-standing Unit for the purposes of continuing professional development. This Unit could also be used in conjunction with Outcome 4 of the Unit: *Gamekeeping: Public Relations for Field Sports* as it could provide support for that Unit.

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.

General information for centres (cont)

Assessment: This Unit is assessed by three assessments. Outcome 1 should be assessed by the production of a written report. Outcome 2 should be assessed by an oral presentation and a brief written summary. Outcome 3 should be assessed by a written assignment which will be based on a case study.

Higher National Unit specification: statement of standards

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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

Explain the importance of biodiversity to wildlife management

Knowledge and/or Skills

- ◆ Definition of biodiversity
- ◆ Importance of biodiversity to people and the environment
- ◆ Importance of biodiversity to field sports
- ◆ Wildlife heritage

Evidence Requirements

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

- ◆ define biodiversity in terms of the variety of life, genetic diversity and diverse ecological roles
- ◆ show how biodiversity affects people's well-being
- ◆ illustrate the role biodiversity can play in promoting a positive image of field sports

Evidence for this Outcome should be gathered in an open-book exercise. Books, magazines, periodicals, journals, reports, the internet and newspapers would all be suitable sources of material which could be used to illustrate the points made.

Assessment Guidelines

This Outcome should be assessed by a written assignment of 700 words maximum, illustrated throughout by referenced material. The three bullet points outlined in the Evidence Requirements should form the structure of the answer. This is an open-book assessment.

Higher National Unit specification: statement of standards (cont)

Unit title: Gamekeeping: Biodiversity for Wildlife Management

Outcome 2

Describe the organisations and outline procedures that promote biodiversity

Knowledge and/or Skills

- ◆ Biodiversity policy and legislation — international, UK and Scottish
- ◆ Organisations involved with biodiversity in relation to field sports
- ◆ Non statutory means of enhancing biodiversity

Evidence Requirements

All the Knowledge and/or Skills must be covered in class. Candidates will need evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ describe in an oral presentation the role of either one statutory or one non statutory body involved in biodiversity conservation through reference to its aims, objectives and the practical work it has undertaken to achieve them
- ◆ illustrate the broad aims of international, UK and Scottish biodiversity policy, legislation and organisations

Assessment Guidelines

An oral presentation, lasting a maximum of 10 minutes, should be made. This should outline the work of one statutory or non statutory body which has had a positive impact on biodiversity. The presentation should make reference to the bodies' aims and objectives and what practical steps it has taken to achieve them. The presentation can be undertaken solo or in pairs.

In addition to the oral presentation a written report of 300 words maximum should be presented to summarise the common aims of biodiversity policy/legislation/organisations. These should include protection, enhancement, research/monitoring, education and liaison/partnerships. This is an open-book assessment.

Higher National Unit specification: statement of standards (cont)

Unit title: Gamekeeping: Biodiversity for Wildlife Management

Outcome 3

Describe how game management practices can have a positive impact on biodiversity

Knowledge and/or Skills

- ◆ Decline in biodiversity
- ◆ Enhancement of biodiversity
- ◆ Ecosystems: lowland; upland and aquatic

Evidence Requirements

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

- ◆ describe how a decline in biodiversity has been reversed for one of the following ecosystems: lowland; upland or aquatic
- ◆ describe how three of the following factors influence biodiversity: habitat loss; species decline; illegal persecution; poor management; human disturbance; adverse weather; introduction of alien species; change in land use practice
- ◆ describe and evaluate habitat improvement measures which have benefited species

Assessment Guidelines

A case study should be made of a site which can be visited easily and for which good information is available in relation to the management of species, habitats and people. A written report with a maximum of 1,000 words is suggested. The report needs to show both how the biodiversity had come to be reduced in the first place and how the actions taken in terms of habitat and species enhancement have improved the biodiversity of the particular site. Judgement should be made as to the success of the enhancement measures taken — have they worked, and why.

Administrative Information

Unit code: DN8T 34

Unit title: Gamekeeping: Biodiversity for Wildlife Management

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Higher National Unit specification: support notes

Unit title: Gamekeeping: Biodiversity for 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

Biodiversity is a vital component of our natural heritage. Contact with it enhances our quality of life. The government is committed to improving biodiversity, and biodiversity management is central to field sports success. An understanding of biodiversity and its importance to field sports and the measures which can both enhance and damage it are important for employees within the sector. Also important is an understanding of the procedures and organisations which promote biodiversity.

This Unit aims to improve candidates' understanding of what biodiversity is, its importance to field sports and how management for game can positively affect its quality. In addition the candidate will be introduced to organisations that promote biodiversity and procedures affecting biodiversity.

Outcome 1 demonstrates the importance of biodiversity to field sports. Candidates should be made aware of the THREE different levels of biodiversity:

- ◆ species/habitat diversity
- ◆ genetic diversity
- ◆ diversity of ecological roles

Some common definitions of biodiversity should be explored. The value of biodiversity to people should also be covered. This should include the effect of biodiversity on physical and mental wellbeing and its economic importance, including green tourism. Moral issues relating to biodiversity conservation should be examined. The relationship between people and biodiversity conservation should be made clear, and the fact this is a dynamic relationship. The sustainable nature of field sport activities should be stressed.

Outcome 2 looks at organisations and procedures that promote biodiversity. Organisation should be both statutory and non statutory — Scottish Natural Heritage, RSPB and the Game Conservancy. Policy should cover both national and international — Nature Conservation (Scotland) Act 2004, Birds and Habitats Directives, Wildlife and Countryside Act would be good examples. A specific example of where there has been an improvement in biodiversity through action arising out of liaison between two parties — SNH and an estate for example — should be considered. National initiatives involving multiple organisations, such as those for moorland or capercaillie, could also be looked at. Reference should be made during delivery to the Birds and Habitats Directives, Wildlife and Countryside Act 1981 and the Nature Conservation (Scotland) Act 2004. The main broad policy and legislative implications they contain should be covered.

The principal site designations that arise from them should also be addressed — SSSI, SPA and SAC. Examples of grant aid for practical biodiversity enhancement should be covered — Scottish Woodland Grant Scheme (FC) and the Rural Stewardship Scheme.

Higher National Unit specification: support notes (cont)

Unit title: Gamekeeping: Biodiversity for Wildlife Management

The role of statutory and non statutory bodies should make reference to their aims and objectives, and how they go about achieving them. These should include SNH, RSPB and the Game Conservancy. Discussion should take place as to their effectiveness in achieving their aims and objectives.

Examples illustrating how liaison, partnership and voluntary action, without recourse to legislation, have achieved biodiversity enhancement should also be examined.

This Outcome should be open-book, and a wide variety of material can be utilised — books, magazines, periodicals, journals, reports, site visits, the internet and newspapers for example.

Outcome 3 is about the factors which affect biodiversity and should be based on a local estate/reserve where good access can be obtained. The choice of upland, lowland or aquatic will depend on the local situation. It should be noted that there may be a combination of more than one ecosystem on some sites — lowland/aquatic and upland/aquatic would be the most likely pairings.

Examples of negative impacts could be blanket afforestation with non-native trees, overgrazing of heather moorland, illegal persecution of raptors, poor weather at hatching or the spread of giant hogweed. Positive impact could be restoration of a heather moor, streamside habitat enhancement for juvenile fish or the introduction of beetle banks, conservation headlands, hedges etc on a lowland farm. The best examples will cover a range of measures.

Guidance on the delivery and assessment of this Unit

This Unit can be delivered free standing or as part of a Group Award. When delivered as part of a Group Award it would be good, during delivery of the other units, to highlight positive aspects of biodiversity as they arise. This would help emphasise the importance of biodiversity to field sports as well as the positive role field sports take in habitat enhancement and management. Throughout delivery full use should be made of field trips, external speakers, websites, and press articles.

Opportunities for developing Core Skills

There are opportunities to develop the Core Skill(s) of *Communication* at SCQF level 6 and *Problem Solving* and *IT* at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

The gathering together of data and the production of the assessment documents will involve *Communication* skills in reading, writing/talking and listening at Higher. The same process will also evidence *Problem Solving* and *Information Technology* at Intermediate 2. There are no significant opportunities to evidence *Numeracy* or *Working with Others*.

Open learning

Open learning could be used to assess this Unit. People currently employed in the field sports industry, or with a sound level of previous experience in field sports management, would find this easiest.

Higher National Unit specification: support notes (cont)

Unit title: Gamekeeping: Biodiversity for Wildlife Management

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: Gamekeeping: Biodiversity for Wildlife Management

The Unit aims to provide you with a clear understanding of what biodiversity is, how it is important to field sports and how field sports management activities can affect its quality.

The three learning outcomes are:

- 1 Explain the importance of biodiversity to field sports.
- 2 Identify and outline the organisations and procedures that promote biodiversity.
- 3 Evaluate how game management practices can have a positive impact on biodiversity.

Outcome 1 will make you clear about exactly what is meant by the term biodiversity. You will also look at why biodiversity is a good thing — the reasons it is of benefit to us, as well as being important for its own sake. The relationship between people, habitats and species will be looked at. The sustainable nature of field sports will also be covered.

Assessed by the production of a written report with a maximum of 700 words.

Outcome 2 looks at the organisations that promote biodiversity such as SNH, RSPB, GC, SGC etc. Policy/legislation is also covered — Nature Conservation (Scotland) Act 2004, Wildlife and Countryside Act 1981, EU Birds and Habitats Directives etc. You will also look at a case study where liaison between two bodies — say SNH and an estate — has brought about an improvement in biodiversity conservation.

Assessed by the delivery of a short oral presentation and a brief written summary.

Outcome 3 deals with the factors which affect biodiversity, both negatively and positively. It will involve you in a case study of a lowland, upland or aquatic ecosystem. You will look at how positive habitat/species/people management has resulted in an improvement to the biodiversity of that ecosystem following a period when it had declined. You will also examine the reasons for the decline.

Assessed through the production of a written report with a maximum of 1,000 words.