



Higher National Unit specification

General information for centres

Unit title: Gamekeeping: Deer Management

Unit code: DN8W 34

Unit purpose: This Unit is designed to provide candidates with an understanding of the main principles associated with deer management, and with the skills required to plan a culling programme. Candidates will be required to describe the habitats commonly utilised by deer and the impact the deer population has upon these habitats. Candidates will also be required to plan a culling programme for a deer population which will incorporate population dynamics, habitats and current legislation.

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

- 1 Describe the habitats commonly utilised by deer.
- 2 Assess the impacts of deer on their habitats.
- 3 Interpret current legislation related to deer in Scotland.
- 4 Plan a culling programme and evaluate the performance of a deer population.

Credit points and level: 2 HN credits at SCQF level 7: (16 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: Prior knowledge or skills of deer management are not essential for this Unit. However it would be beneficial if candidates had previous practical experience in deer control and culling, or had studied deer biology. Where candidates have had such experience, the Unit will provide the opportunity to learn new skills and enhance existing knowledge and ability.

Core Skills: There are opportunities to develop the Core Skills of *Numeracy, Problem Solving, Communication* and *IT* 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.

General information for centres (cont)

Assessment: Outcome 1 will be assessed using a supervised practical test, Outcomes 2, 3 and 4 will be assessed by one instrument of assessment which requires candidates to produce a project centred on a deer forest management plan or a deer management group plan to meet management objectives, methods of achieving objectives, monitoring and recording achievements against objectives.

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

Describe the habitats commonly utilised by deer

Knowledge and/or Skills

- ◆ Habitat recognition — open hill/woodland
- ◆ Plant species recognition
- ◆ Animal species recognition

Evidence Requirements

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

- ◆ identify a minimum of three types of habitats commonly utilised by deer
- ◆ identify a minimum of 20 plant species, found within habitats commonly utilised by deer, correctly using common and Latin names
- ◆ identify a minimum of five Animals, found within habitats commonly utilised by deer, correctly using common and Latin names

Assessment Guidelines

Evidence could be generated using a sample basis and should be generated through supervised practical tests.

The use of photographic material as a substitute for live material would be suitable for tests.

Higher National Unit specification: statement of standards (cont)

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Outcome 2

Assess the impacts of deer on their habitat

Knowledge and/or Skills

- ◆ Habitat quality
- ◆ Removal of plant/parts grazing/browsing
- ◆ Diet selection palatability/seasonality
- ◆ Weather/Topography
- ◆ Conservation/Biodiversity
- ◆ Deer management planning
- ◆ Deer population dynamics
- ◆ Damage assessment principles

Evidence Requirements

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

- ◆ describe the principles of habitat damage assessment in relation to deer
- ◆ identify the key indicators in assessing the impact deer are having on the habitat taking into account the time of year
- ◆ distinguish between impacts and damage
- ◆ outline the importance of deer management planning and population dynamics in relation to habitat assessment
- ◆ assess whether objectives are being realised

Assessment Guidelines

The assessment of this Outcome should be combined with Outcome 3 and 4 in producing a report which would be a pro forma for a deer management plan for a deer forest, deer management group or appropriate study area.

Higher National Unit specification: statement of standards (cont)

Unit title: Gamekeeping: Deer Management

Outcome 3

Interpret current legislation related to deer in Scotland

Knowledge and/or Skills

- ◆ Interpretation of current Deer Scotland Act
- ◆ Wild Game meat regulations
- ◆ DEFRA regulations/animal health
- ◆ Firearms/ammunition legislation
- ◆ The legal requirements to notify the local animal health divisional office at the first sign or suspicion of a notifiable disease
- ◆ Awareness of the legal requirements during a disease outbreak, such as FMD

Evidence Requirements

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

- ◆ describe and interpret current legislation relevant to deer control and management
- ◆ detail the actions that are legally required if you suspect a deer to have a notifiable disease and during a disease outbreak

Assessment Guidelines

This Outcome should be assessed holistically with Outcome 2 and 4 by a report which forms part of a project.

Outcome 4

Plan a culling programme and evaluate the performance of a deer population

Knowledge and/or Skills

- ◆ Population dynamics
- ◆ Deer counting/identification by sex
- ◆ Annual increment/calving
- ◆ Mortality rates
- ◆ Ageing/jaw assessment
- ◆ Analysis of data
- ◆ Deer population management
- ◆ Deer management objectives
- ◆ Health and Safety

Higher National Unit specification: statement of standards (cont)

Unit title: Gamekeeping: Deer Management

Evidence Requirements

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

- ◆ describe a population model to calculate sustainable culling rate from given statistics of population size; sex ratios and annual rate of natural mortality of adults and calves to meet deer management objectives

The model should be for a deer forest, deer management group, or appropriate study area.

Assessment Guidelines

This Unit is assessed holistically with Outcomes 2 and 3.

Administrative Information

Unit code: DN8W 34
Unit title: Gamekeeping: Deer Management
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Higher National Unit specification: support notes

Unit title: Gamekeeping: Deer 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 80 hours.

Guidance on the content and context for this Unit

This Unit is primarily intended for post-school candidates who plan to embark in a career in Deer Management, Game keeping, or a related industry for which knowledge of deer management is advisable. This Unit is also applicable for those currently employed in the Game keeping sector or an associated industry who wish to take it as a free standing Unit as part of their continuous personal development.

The Unit aims to develop candidate skills in utilising relevant information available through the gathering and interpretation of information, such as deer numbers and densities, recruitment rates and habitat assessment. This information will facilitate objective management based on good quality information in developing a deer management plan.

Outcome 1 introduces the candidate to the different types of habitats associated with deer. It offers opportunities for the candidate to recognise the plants and other animal species by common or Latin names and how they interact in these habitats. The advantages and disadvantages of the different types of habitats on deer will be discussed.

Outcome 2 identifies the importance of having clearly defined deer management objectives from the outset and the use of deer management plans in meeting the objectives. Candidates should be aware of differing objectives and the constraints and opportunities this will have on deer management. Candidates should be introduced to the principles of habitat assessment to determine the health and state of plant communities, individual plants and whether the health of the habitat is improving or deteriorating through habitat condition, monitoring assessment. Plant knowledge should be developed to enable candidates to identify plants that are palatable to deer at different times of the year taking into account the geographical and weather variations. Also the link between population dynamics to habitat objectives to ensure sustainable deer management. It is recommended that this is taught using lectures, practical visits to deer forests and sporting estates and computer-based learning materials.

Outcome 3 deals with legislation. Candidates will be introduced to the legal requirements of deer forest, sporting estate owners, government or non government bodies associated with deer management, the Acts that implement these requirements which are:

Deer Scotland Act 1966.

Deer (firearms act) Scotland Order 1985 and Firearms (Amendment) Act 1988.

The 'Wild Game Meat (Hygiene and Inspection) Regulations 1995' covering the handling and processing of venison from the time the deer is culled to the final consumer.

The Food Safety Act 1995.

Higher National Unit specification: support notes (cont)

Unit title: Gamekeeping: Deer Management

The Animal Health legislation relevant to deer.

Candidates will also be taught the procedures and legal requirements associated with notifiable diseases and what actions would be taken in the case of a disease outbreak such as Foot and Mouth.

Outcome 4 integrates a range of aspects through the study of population dynamics, by the use of a Population Model.

- 1 Deer
- 2 Species
- 3 Deer Management Objectives
- 4 Reproductive performance (proportion of adult and yearling females that are pregnant and lactating)
- 5 Mortality
- 6 Recruitment (numbers and rate of recruitment to the adult population immigration and emigration)
- 7 Numbers and densities through deer counts identifying sex
- 8 Analysis of data to implement appropriate culling programme

Guidance on the delivery and assessment of this Unit

This Unit can be delivered as a free standing Unit or as part of a Group Award. When delivered as part of a Group Award it would be beneficial for it to be delivered after or in conjunction with the complementary units; Deer Biology and Managing Sporting Habitats. In these circumstances candidates will more easily appreciate the integration of certain material.

Throughout the Unit use should be made of web sites and reports from lead bodies such as Deer Commission of Scotland, Association of Deer Management Groups, Scottish Natural Heritage and other appropriate sources of information. Visits to Deer Management Group Meetings, and deer forests would enhance the students learning. Useful web sites include:

www.bds.org.uk
www.adbn.ac.uk/mammal/index.htm
www.deer-managment.co.uk
www.dcs.gov.uk
www.snh.org.uk
www.deer-uk.com/british%20deer.htm

The assessment of this Unit should be a project which includes a practical test for the identification of plants and animals that interact in deer habitats. The project would be in the form of a Deer Management Plan where the student would plan action and evaluate a population of deer.

Higher National Unit specification: support notes (cont)

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For Outcome 3 candidates would be required to produce a report that will focus on the legal requirements for controlling and handling deer. Through out the year this would include out of season culling. Through this report the candidate will demonstrate knowledge of recognising early signs of notifiable diseases in deer and what they are legally required to do. Candidates will show that they are aware of the key practices to reduce the risk of disease spreading to other deer and animals. The report will also include an awareness of the potential effect that these diseases can have on the public and animal health and welfare, and the implications for the deer industry, business productivity. This report would be an important part of the deer management plan.

Opportunities for developing Core Skills

There may be opportunities to gather evidence towards the Core Skills of *Numeracy, Problem Solving, Communication* and *IT* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills components.

Open learning

This Unit could be delivered by distance learning. However, it would require planning by the centre to ensure the sufficiency and authenticity of the candidate evidence.

To keep the administrative burden to a minimum, it is recommended that a single assessment based on a project is used for open and distance learning.

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: Deer Management

The Unit aims to provide you with knowledge and skills associated with deer management to identify deer habitats, the plant communities that make up these habitats, other animals that share these habitats and how they all interact and impact on the habitats that they live in. It is intended to introduce you to the skills required to enable you to contribute to a deer management plan which will implement the management of a deer population for a given area such as a deer forest, deer management group or other identified area to meet clearly identified deer management objectives. You will be taught how to interpret current legislation in relation to deer management. Areas that will be highlighted include the Deer Act 1996, Deer (firearms sect) Scotland Order 1985 and firearm (amendment) Act 1988 Wild Game meat regulations 1995, covering the handling and processing of venison from the time the deer is culled to the final consumer, The Food Safety Act 1995, The Animal health Legislation relevant to deer which will cover notifiable diseases and how to recognise those diseases and the legal procedures in the case of a outbreak like foot and mouth disease.

In order to complete this Unit successfully, you will be required to produce a project which would cover all outcomes centred on deer forest or deer management group or appropriate study area deer management plan.