

#### **Higher National Unit specification**

#### General information for centres

Unit title: Biodiversity Conservation

**Unit code:** F430 34

**Unit purpose:** This Unit is designed to give candidates an introduction to biodiversity conservation in the United Kingdom. It looks at why biodiversity is important and how it has been affected and supported by a variety of factors. It is suitable for candidates who need a broad introduction to the topic and for those who will go on to study the topic in more detail.

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

- 1 Explain why conserving biodiversity is important.
- 2 Describe the mechanisms that support biodiversity conservation in the UK.
- 3 Investigate an example of biodiversity conservation in the UK.

**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:** Access to this Unit is at the discretion of the centre. This is an introductory Unit and there are no requirements regarding prior knowledge or skills.

**Core Skills:** There are opportunities to develop the Core Skills of *Communication* and *Problem Solving* 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:** The Unit could be assessed by a single instrument of assessment that requires candidates to produce a submission based on a case study or on their own relevant workplace experience. It would also be possible to break the assessment down into three separate assessment events that assess each Outcome separately.

## Higher National Unit specification: statement of standards

#### Unit title: Biodiversity Conservation

#### **Unit code:** F430 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**

Explain why conserving biodiversity is important

#### Knowledge and/or Skills

- Biodiversity factors
- Biodiversity conservation

#### **Evidence Requirements**

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

- explain the main factors affecting biodiversity in the UK; this must include reference to habitat loss, non-native species, climate change and land use changes
- using the standard criteria of aesthetics, ethics, ecosystem services, future contingency, and economic, explain why conserving biodiversity is important taking one species or habitat as an example

#### **Assessment Guidelines**

This Outcome could be assessed as a stand alone task or be combined with the assessment of Outcomes 2 and 3, details of which are given under Outcome 3.

## Outcome 2

Describe the mechanisms that support biodiversity conservation in the UK

#### Knowledge and/or Skills

- Policy initiatives
- Conservation legislation
- Site designations
- Statutory and voluntary conservation organisations
- Grant schemes

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

#### Unit title: Biodiversity Conservation

#### **Evidence Requirements**

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

- describe two current main policy initiatives which drive biodiversity in the UK
- describe the key parts of one international, one UK and one Scottish biodiversity conservation legislation
- explain the role of the main biodiversity site designations in protecting species and habitats
- describe the role of one home country statutory and two voluntary organisations involved with biodiversity conservation
- giving an example for each, describe the role of two main grants schemes in the home nation which support biodiversity action

#### **Assessment Guidelines**

This Outcome could be assessed as a stand alone task or be combined with the assessment of Outcomes 1 and 3, details of which are given under Outcome 3.

## Outcome 3

Investigate an example of biodiversity conservation in the UK

#### Knowledge and/or Skills

• Biodiversity conservation actions

#### **Evidence Requirements**

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

- investigate relevant biodiversity conservation actions
- investigate the effectiveness of the proposed biodiversity conservation actions

Using the chosen example, the candidate must examine the species, habitat or site and evaluate the effectiveness of the proposed conservation actions.

#### **Assessment Guidelines**

This Outcome could be assessed separately or combined with Outcomes 1 and 2 as part of a single assessment for the Unit.

A holistic assessment could be based on a case study or on the candidate's relevant workplace experience. In the assessment candidates could be asked to identify a specific example which demonstrates biodiversity conservation in action in the UK or alternatively the candidate could use a management plan for a site. It is the responsibility of the tutor to ensure that the site selected for the case study is sufficient for candidates to generate all of the minimum Evidence Requirements for each Outcome. In the event of re-assessment a substantially different case study should be selected.

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

## Unit title: Biodiversity Conservation

Evidence, presented in a written format, should be in a well structured, clear style that complies with accepted practice in terms of referencing and format.

## **Administrative Information**

Unit code:	F430 34
Unit title:	Biodiversity Conservation
Superclass category:	SL
Original date of publication:	August 2008
Version:	02 (June 2009)

#### **History of changes:**

Version	Description of change	Date
02	Superclass category changed from QA to SL.	05/06/09

#### Source:

© Scottish Qualifications Authority 2008, 2009

This publication may be reproduced in whole or in part for educational purposes provided that no profit is derived from reproduction and that, if reproduced in part, the source is acknowledged.

SQA

SQA acknowledges the valuable contribution that Scotland's colleges have made to the development of Higher National qualifications.

Additional copies of this Unit specification can be purchased from the Scottish Qualifications Authority. Please contact the Customer Contact Centre for further details, telephone 0845 279 1000.

#### Higher National Unit specification: support notes

#### Unit title: Biodiversity Conservation

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

The Unit is a basic introduction to biodiversity conservation with particular reference to the UK. For some candidates this will be their only involvement with the topic while for others it will form a building block for more detailed study. The content is therefore deliberately broad and seeks to investigate a basic rationale for conserving biodiversity as well as the mechanisms that underpin and support practical action.

Biodiversity is now recognised as a crucial part of the sustainability agenda and it has developed its own rationale and methodologies. Candidates should be aware of the development of the biodiversity agenda from its inclusion in the Earth Summit and the Convention on Biological Diversity which led to a prompt response from the British government through the UK Biodiversity Action Plan (the UKBAP) or equivalent. This has now set the framework for conservation action in this country through the instigation of Species and Habitat Action Plans and the encouragement of Local Biodiversity Action Plans. More recently the Scottish Government has produced a Biodiversity Strategy which focuses on the Scottish situation.

While the UKBAP and its attendant policy initiatives set the scene for biodiversity conservation, the actual delivery is coordinated through legislation and various statutory and voluntary organisations with a range of financial support mechanisms helping to deliver the action on the ground. This is a potentially complex and confusing scenario and it is important that candidates are not put off by the detail.

Outcome 1 provides an opportunity for investigation and discussion in relation to the justification for conserving biodiversity. While there can be no doubt that species and habitats are in decline across the world there is often less thought given to why this is a bad thing. Most candidates will have sufficient knowledge of the subject to participate in a discussion where different ideas and priorities can be put forward.

Outcome 2 deals with the mechanisms for delivering biodiversity conservation. The policy framework could be the starting point here since it has ramifications that include actions at both government and local levels but also involve the wider duty of all public bodies to promote biodiversity. The principal policy initiatives would be, at an international level the Convention on Biological Diversity, at a UK level the UK Biodiversity Action Plan, and at a Scottish level the Scottish Biodiversity Strategy. These eventually come down to Local Biodiversity Action Plans and Species and Habitat Action Plans and the relationship between these policy drivers and deliverers should be mentioned.

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

#### Unit title: Biodiversity Conservation

One of the ways in which the policy targets can be achieved is through legislation and candidates should be aware of the main pieces of biodiversity conservation legislation. Again this operates at different levels and, with the increasing importance of European legislation in guiding UK legislation, this could be the starting point with mention of the Birds and Habitats Directives. At a UK level the Wildlife and Countryside Act is still the crucial piece of legislation as it has been the mechanism by which the two Directives have been put in place. With changing circumstances it has become necessary to modify the Wildlife and Countryside Act but devolution has meant that separate legislation has been enacted in different parts of the UK. Candidates should be aware of the main conservation aspects of the Countryside and Rights of Way Act and the Nature Conservation (Scotland) Act.

The legislation has put in place a number of statutory site designations as one of the main ways in which species and habitats should be conserved. While there are very many designations candidates should focus on Special Protection Areas, Special Areas of Conservation, Sites of Special Scientific Interest and National Nature Reserves. It is important that candidates can give some assessment of the success of such designations in achieving their objectives.

The main players in implementing the biodiversity policy objectives are a range of organisations, both statutory and voluntary. The various constituent parts of the UK each have their own statutory organisation and the candidates should be aware of the remits of Scottish Natural Heritage, Natural England and the Countryside Council for Wales. Following recent legislative changes there is little functional difference between their responsibilities but each obviously has a national focus. Mention should be made of the coordinating role of the Joint Nature Conservation Committee.

There is a plethora of voluntary conservation organisations each with its own particular specialist remit. The most obvious ones are the Royal Society for the Protection of Birds and the Wildlife Trusts Partnership (the Scottish Wildlife Trust in Scotland) but if the assessment for this Outcome is linked with Outcome 3 then candidates would be expected to correctly identify the organisation most closely involved with the example they have chosen.

The actual delivery of biodiversity conservation frequently relies upon funding. This is mainly from grants and candidates should be able to identify appropriate sources. The grant system is constantly being reviewed and modified so it is difficult to be prescriptive but the Rural Development Contracts are likely to be the main funder for much of the conservation work in the wider countryside. Other, more specialist, sources may be available and candidates could relate these to specific examples. Rather than seeking to test an extensive body of facts it may be better to encourage candidates to consider these matters in a practical context. This could fit neatly into a single assessment which asks the candidate to follow through all of these aspects in relation to a specific example.

# [The content above refers to legislation and funding bodies at the time of writing and centres should ensure that this information is updated as legislation and sources of funding change].

Outcome 3 specifically asks the candidate to investigate a particular example of biodiversity conservation and it is possible to extend the investigation to include the material covered in Outcomes 1 and 2. This could be a species or a habitat, either of which could be linked to a Species or Habitat Action Plan as described in the UK Biodiversity Action Plan or a Local Biodiversity Action Plan or it could be a site management plan. There is a substantial amount of information readily available on Species and Habitat Action Plans and the corresponding monitoring and reporting which has taken place.

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

#### Unit title: Biodiversity Conservation

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

This Unit is likely to form part of Group Award designed for candidates studying countryside and environmental courses but it will also be useful for courses that cover a broader range of land management topics. The precise timing of the delivery can best be judged in the context of the Unit but it is important that the Course is contextualised for different candidate groups. There may be opportunities for integration of delivery and assessment with other Units within the Group Award being undertaken.

If it is decided to assess the Unit through a single project then the assessment instrument should be issued at the start of the Unit to allow candidates to work through the different elements of the assessment at the same time as the material is being covered in class. In this way the assessment will be both formative as well as summative.

Centres should ensure that the site selected for the case study is sufficient for candidates to generate all of the minimum Evidence Requirements for each Outcome. In the event of re-assessment the tutor should select a substantially different case study scenario.

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

Although the Unit is designed to provide candidates with the knowledge and skills related to their specific occupational area there may be opportunities to develop the Core Skills of *Communication* and *Problem Solving*.

If the assessment for the Unit is based on a single submission then candidates would be expected to research their topic of choice by accessing information (probably mainly from the internet) and to assess the quality and relevance of the material. This would develop their Problem Solving skills in analysing and reviewing a complex situation/issue.

If the Unit is assessed holistically, the actual submission would need to be well structured and presented in a clear style that complied with accepted practice in terms of referencing and format. Such a submission could contribute towards the Component Written or Oral Communication of the Core Skill *Communication* at level 6.

## **Open learning**

This Unit is well suited to delivery by distance learning. There is considerable scope for directed learning with the candidate being guided towards important data sources. The intention is that the underlying principles relating to biodiversity conservation are investigated in the context of a specific example and as a consequence the candidate could put together a portfolio of necessary evidence which could be submitted electronically.

With regard to assessment, planning would be required by the centre to ensure the sufficiency and authenticity of the candidate evidence.

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

Unit title: Biodiversity Conservation

## 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: Biodiversity Conservation

In this Unit you will be introduced to biodiversity — what it is and why it is important. Such knowledge is essential for anyone working in the countryside and it is important that you have the opportunity to think about why conserving biodiversity is worthwhile and to discuss your thoughts with fellow candidates. The importance of biodiversity conservation is recognised in government policy and legislation and is a key component of the wider sustainability debate.

The Unit is divided into three main areas of study, each of which is the subject of a separate Outcome:

Outcome 1 looks at what biodiversity actually is. This may seem obvious but the concept is more complex than it first appears. You will look at what is happening to biodiversity in the UK and beyond by focusing on the various factors that affect it including changes in land use, habitat loss and climate change. For many of you some of these facts will be familiar but there is frequently less discussion of why conserving biodiversity is important and you will be encouraged to discuss your views with your fellow candidates.

Outcome 2 deals with the mechanisms that are in place to ensure that biodiversity is given a high priority and the assistance that is available to ensure that conservation action is put into practice. These include government policy, legislation and site designations but also included are the less obvious mechanisms such as agricultural and forestry grants which are now, to a large extent, targeted on biodiversity and the environment.

In Outcome 3 you will investigate a particular aspect of biodiversity action and evaluate its success in achieving its objectives. This is most likely to be done by selecting a species or habitat, looking at the conservation action that is proposed and deciding how effective it has been. The intention is that this Outcome will allow you to bring together the different parts of the Unit so that they can be seen in context and the links between them are more obvious.

While the Unit could be assessed by a separate assessment tasks, it is also possible to combine the assessments into a single submission which could allow you to investigate all of the above elements in relation to a single specific example (such as a species or a habitat). Through this approach, a more complete and coherent picture can be developed of the way in which biodiversity conservation works in the UK and to assess for yourself how effective this can be.

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