

National Unit Specification: general information

UNIT Investigating Animal Wildlife (SCQF level 5)

CODE D870 11

SUMMARY

The Unit is designed to meet the needs of candidates following a range of programmes and is particularly suitable for the land and environment sector. On completion of the Unit candidates will have a general knowledge of animal groups and will be able to identify unknown animals with the aid of a key and extract and collate information about animal species. Candidates will also be able to apply field craft skills to the study of animals in their natural environment.

OUTCOMES

- 1 Describe the key characteristics of given animals.
- 2 Identify a range of common invertebrates using a key.
- 3 Investigate the ecology of two species of a vertebrate group.
- 4 Record and analyse information obtained by observation of a vertebrate species.

RECOMMENDED ENTRY

Entry is at the discretion of the centre.

CREDIT VALUE

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

*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.

Administrative Information

Superclass: SH

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National Unit Specification: general information (cont)

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CORE SKILLS

There is no automatic certification of Core Skills in this Unit.

There are opportunities for Core Skill development; these are highlighted in the Support Notes of this Unit Specification.

National Unit Specification: statement of standards

UNIT Investigating Animal Wildlife (Intermediate 2)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Describe the key characteristics of given animals.

Performance Criteria

- (a) The key characteristics of given vertebrates are described accurately.
- (b) Given vertebrates are allocated correctly to their taxonomic group.
- (c) The key characteristics of given invertebrates are described accurately.
- (d) Given invertebrates are allocated correctly to their taxonomic group.

OUTCOME 2

Identify a range of common invertebrates using a key.

Performance Criteria

- (a) Information is obtained by active participation in the investigation.
- (b) The use of appropriate keys is consistent and accurate.
- (c) Conclusions drawn are valid.

OUTCOME 3

Investigate the ecology of two species of a vertebrate group.

Performance Criteria

- (a) The selection of species for the investigation is appropriate for the given situation.
- (b) Relevant information is selected and processed accurately.
- (c) Information is presented in an appropriate format.
- (d) Conclusions drawn are valid and explanations given are supported by evidence.

OUTCOME 4

Record and analyse information obtained by observation of a vertebrate species.

Performance Criteria

- (a) Information is obtained by active participation in the investigation.
- (b) Investigation procedures are described accurately.
- (c) Relevant observations are recorded in an appropriate format in a field notebook.
- (d) Recorded information is analysed and presented in an appropriate format.
- (e) Conclusions drawn are valid.

National Unit Specification: statement of standards (cont)

UNIT Investigating Animal Wildlife (Intermediate 2)

EVIDENCE REQUIREMENTS FOR THIS UNIT

All relevant operational procedures undertaken in this Unit must adhere to current legislation, regulations, codes of practice and manufacturers' recommendations where appropriate.

Written and/or oral recorded evidence is required to demonstrate that candidates have met the requirements of all Outcomes and Performance Criteria (PC).

Outcome 1

Written and/or oral recorded evidence of the candidate's ability to demonstrate knowledge and understanding of 10 given animals with information covering all Performance Criteria is required. At least seven animals from mammals, birds, fish, reptiles and amphibians must be described for PCs (a) and (b) and at least three animals from different invertebrate groups must be described for PCs (c) and (d).

Outcome 2

Evidence of an appropriate level of attainment must be generated with items covering all Performance Criteria. A report of an investigation of one ecosystem is required and must be the individual work of the candidate. The report must be based on an investigation in which the candidate has demonstrated an acceptable level of participation. The collection of the information may involve group work.

Five common invertebrates must be identified correctly.

Outcome 3

Evidence of an appropriate level of attainment must be generated with items covering all Performance Criteria. A report of one investigation of the ecology of two species of a vertebrate group is required and must be the individual work of the candidate. The report must be based on an investigation in which the candidate has demonstrated an acceptable level of participation. The collection of the information may involve group work.

Outcome 4

Evidence of an appropriate level of attainment must be generated with items covering all Performance Criteria. A report of an investigation involving the observation of one vertebrate species is required and must contain information about eight different activities by the species on ten separate occasions. The report must be the individual work of the candidate and be based on an investigation in which the candidate has demonstrated an acceptable level of participation. The collection of the information may involve group work.

National Unit Specification: support notes

UNIT Investigating Animal Wildlife (SCQF level 5)

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 is an optional Unit within the National Certificate in Animal Care at SCQF level 5, but may also be taken as a free standing Unit.

This Unit is aligned to the following Lantra, Sector Skills Council's National Occupational Standard (NOS) Units:

(CU7) Receive, transmit and store information within the workplace

Outcome 1

The animals used should reflect the candidates' areas of interest and should, where possible, be well represented in the local area. The characteristics studied should be restricted to the features which facilitate allocation to particular groups. Although the main vertebrate groups should all be included, invertebrate groups should be restricted to about five. It is not essential, at this stage, that scientific names are used for the taxonomic groups studied. Phylum class, in some cases, and order, in exceptional cases, should be covered.

Outcome 2

Live specimens in their natural environment should be used for the keying out exercise wherever possible. Freshwater invertebrates from ponds or streams and leaf litter invertebrates are ideal for this investigation. Care should be exercised in the selection of keys to ensure that they are not too complex. Identification to species level is not always necessary.

Outcome 3

Library-based research and visits to local museums are both appropriate for this investigation. Care should be taken to ensure that there is good coverage of the commoner local species over the class as a whole. The two species selected by a candidate should belong to the same group but the interpretation of group will vary. Suitable examples of groups would be the lagomorphs, the mustelids, deer, small mammals, raptors, corvids, passerines and so on. It should also be possible to choose a native and an introduced member of a group such as otter and mink. It is important to investigate the features the two species have in common which distinguish them from other groups as well as their individual distinguishing features.

Information and data collected should stress the different features of the ecological niches of the two species selected and could include distribution, habitat, food preferences and so on. This investigation lends itself to oral presentations by candidates to disseminate the accumulated information.

National Unit Specification: support notes (cont)

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Outcome 4

This Outcome lends itself to the development of candidates' fieldcraft skills.

Consequently careful guidance will be required with respect to clothing, footwear, aids such as field guides, binoculars, pencil and field notebook and all the aspects of conduct while working in the field. Common birds are ideal subjects for this investigation and if this choice is made it may be sensible to exclude birds from the choice of species for Outcome 3.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Delivery of this Unit lends itself to the use of a range of approaches. Some formal sessions will be necessary to introduce animal classification. Delivery of most of the Unit should, however, be strongly candidate-centred and should be carried out by investigating animals in their natural environment.

The library-based research required for Outcome 3 may demand some careful guidance with respect to planning the investigation and finding, extracting and collating information from diverse sources.

Outcome 4 will also require guidance for the preparation for making field observations, undertaking the work and recording observations in a systematic manner. Individual or small group work may be necessary here.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

There may be opportunities to gather evidence towards Core Skills in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Outcome 2 could provide opportunities for the development of communication skills and provide the opportunity for *Working with Others* at SCQF level 5.

Outcome 3 could provide opportunities for the development of *Communication* and *IT* skills at SCQF level 5.

Outcome 4 could provide opportunities for the development of *Problem Solving* at SCQF level 5.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Centre may use the instruments of assessment which are considered by teachers/lecturers to be the most appropriate. Outcome 1 can be assessed by an appropriate level of attainment in an end-of-Unit test with questions covering all Performance Criteria. Outcomes 2–4 can be assessed by performance evidence, where appropriate, and an appropriate level of attainment in the associated reports.

Time should be allowed for any necessary re-assessment.

National Unit Specification: support notes (cont)

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Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003), SQA Guidelines on e-assessment for Schools (BD2625, June 2005).

DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements