National Unit Specification: general information

UNIT Animal Care: Animal Survival Behaviour (SCQF level 6)

CODE F7GC 12

SUMMARY

The Unit introduces the candidate to the study of animal behaviour, focusing on the survival aspects of behavioural ecology. Candidates will develop their knowledge of survival strategies adopted by a variety of animal species with regard to energy balance, reproductive strategy and social behaviour.

OUTCOMES

- 1 Explain different strategies adopted by animals to maintain an energy balance.
- 2 Explain the advantages and disadvantages of reproductive strategies found in higher vertibrates.
- 3 Explain social behaviours in given species.

RECOMMENDED ENTRY

Entry is at the discretion of the centre. Candidates doing this Unit do not need any prior knowledge or experience of animal behaviour. However a good knowledge of a variety of animal species habits will be useful.

CREDIT VALUE

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

*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: RH

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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

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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

Explain different strategies adopted by animals to maintain an energy balance.

Performance Criteria

- (a) The explanation of energy conservation strategies is correct.
- (b) The explanation of feeding behaviours adopted is correct.

OUTCOME 2

Explain the advantages and disadvantages of reproductive strategies found in higher vertibrates.

Performance Criteria

- (a) The explanation of advantages and disadvantages of monogamous relationships is correct.
- (b) The explanation of advantages and disadvantages of polygamous relationships is correct.

OUTCOME 3

Explain social behaviour in given species.

Performance Criteria

- (a) The description of the main features of social behaviour in given species is correct.
- (b) The explanation of the advantages and disadvantages of social behaviours in given species is correct.

National Unit Specification: statement of standards

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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 recorded oral evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria (PC).

Written and/or oral evidence is required which demonstrates the candidate has achieved Outcome 1 and 3. The evidence for these Outcomes should be obtained under closed-book, supervised conditions and should last no more than one hour.

Written and/or oral evidence should be produced to demonstrate that the candidate has achieved Outcome 2. The candidate's ability to explain the advantages and disadvantages of a minimum of two mating strategies should be assessed under open-book conditions and be 800–1,000 words. Centres must be satisfied that the evidence submitted is the work of individual candidates.

National Unit Specification: support notes

UNIT Animal Care: Animal Survival Behaviour (SCQF level 6)

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 also suitable for inclusion in Biology programmes.

This Unit is a knowledge based Unit which relates to the whole industry and as such does not align to a specific National Occupational Standards Unit.

The following notes correspond to Outcomes 1–3:

- The behaviour patterns of a variety of species should be discussed in relation to the process of maintaining an energy balance. The Unit should introduce the idea that ecosystems have a finite amount of energy available at any given time and animals must budget their energy use and intake effectively to survive. Discussion of food webs and entropic levels will aid the understanding of energy in ecosystems. Energy conservation strategies could include; habitat selection, discussion of optimal foraging theory and strategies adopted by animals living in different quality patchy habitat. Other areas worth considering for inclusion may be migration, hibernation and hunting in packs. Feeding behaviours to be considered should include; types of food and handling times, a variety of feeding methods and feeding frequency.
- Using specific examples of animals, discussion should focus on the advantages and disadvantages of the three main reproductive strategies found in higher vertebrates; monogamy, polygamy and polyandry. It may also be useful to discuss promiscuous matings by way of comparison. The advantages and disadvantages of the three strategies could be examined in terms of; the effort required to obtain a mate, the parental care of young, the stability of the food supply, the proportion of young reaching maturity and the maintenance of the gene pool. Consideration could also be given to the effect these strategies have upon territoriality, nesting and burrowing and bet hedging when adopting a mating strategy and the methods employed in raising young.
- Examples of a number of species should be used to illustrate the variety of social behaviours found in the animal kingdom. Candidates should be introduced to the reasons for social behaviours in animals including; group foraging, group protection, the 'selfish herd' effect, increased vigilance, reproductive coordination and the advantage to parent and offspring. The social behaviours examined should include: small family grouping/solitary behaviour; herding/shoaling; territorial behaviour and species recognition. The advantages and disadvantages of each strategy should be discussed and could reflect the reasons for social behaviours occurring as listed above.

National Unit Specification: support notes (cont)

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GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

A candidate-centred, resource-based approach is likely to be the most suitable for this Unit. The candidate could choose specific animal groups and follow through their behaviour patterns. Outcomes 1 and 2 could include the study of individual animals or groups of animals. The use of videos and observations would be appropriate for this Unit. Visits to animal collections may also be of use to examine social group behaviour.

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. *Communications, ICT* and the *Working with Others* (SCQF level 5) components will be some of the Core Skills used in this Unit.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Each candidate should be assessed at appropriate points throughout the Unit. Where a candidate is unsuccessful in achieving an Outcome, provision should be made for remediation and reassessment.

Outcome 1 and 3 could be a closed-book assessment. The assessment should cover specific examples covered in class and questions should promote a deep understanding of both Outcomes. A combination of short answer and restricted response questions could be used to assess both Outcomes. A suitable instrument of assessment for Outcome 2 would be an open-book assignment.

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