



Higher National Unit Specification

General information for centres

Unit title: Poultry Welfare and Behaviour

Unit code: F43D 34

Unit purpose: This Unit is designed to enable candidates to develop the knowledge and skills to manage effectively farmed poultry through consideration of the birds' welfare. It will give candidates a detailed understanding of the physiological and behavioural indicators of poultry welfare and identify how these relate to both good husbandry and the legislative requirements. The Unit also evaluates the characteristics of selected poultry production systems and the extent to which they satisfy welfare standards and enable birds to express essential freedoms is also considered.

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

- 1 Explain the behaviour patterns of domestic fowl.
- 2 Explain the means of assessing poultry welfare.
- 3 Evaluate poultry production systems in terms of bird welfare.

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 is at the discretion of the centre. However, it would be beneficial if candidates had an awareness of poultry production systems.

Core Skills: There are opportunities to develop the component Written Communication of the Core Skill *Communication* and the component Critical Thinking of the Core Skill *Problem Solving*, both 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: This Unit may be assessed using three instruments of assessment. Outcomes 1 and 2, which cover fundamental underpinning knowledge, may be assessed by restricted and extended response questions in a closed-book, supervised environment. Outcome 3 may be assessed by an open-book, investigative assignment.

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 behaviour patterns of domestic fowl

Knowledge and/or Skills

- ◆ Reproductive behaviour
- ◆ Imprinting
- ◆ Social dominance
- ◆ Aggressive behaviour
- ◆ Abnormal behaviours

Evidence Requirements

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

- ◆ explain the behaviour exhibited by domestic fowl during courtship and nesting
- ◆ explain the process of imprinting in chicks
- ◆ explain linear and non-linear social dominance hierarchies and their influence on aggression in poultry
- ◆ explain the mechanisms of two commercially important environmentally-induced abnormal behaviours

This Outcome must be assessed by means of a supervised, closed-book assessment.

Assessment Guidelines

This Outcome may be assessed by restricted and extended response questions.

Higher National Unit specification: statement of standards (cont)

Unit title: Poultry Welfare and Behaviour

Outcome 2

Explain the means of assess poultry welfare

Knowledge and/or Skills

- ◆ Five Freedoms
- ◆ Welfare standards and recommendations
- ◆ Physiological indices of welfare
- ◆ Behavioural indices of welfare

Evidence Requirements

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

- ◆ explain the Five Freedoms
- ◆ describe the minimum welfare standards appropriate to poultry as detailed by one named organisation
- ◆ explain one short term, one long term and one other physiological index of poultry welfare
- ◆ explain one short term, one long term and one other behavioural index of poultry welfare

This Outcome must be assessed by means of a supervised, closed-book assessment.

Assessment Guidelines

This Outcome may be assessed by a combination of question types including restricted and extended response.

Higher National Unit specification: statement of standards (cont)

Unit title: Poultry Welfare and Behaviour

Outcome 3

Evaluate poultry production systems in terms of bird welfare

Knowledge and/or Skills

- ◆ Production systems
- ◆ Broiler production systems
- ◆ Bird welfare

Evidence Requirements

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

- ◆ evaluate one intensive and one extensive egg production systems, their impact on the welfare of the birds and the bird welfare challenges posed by each system
- ◆ evaluate the welfare of broilers against defined criteria when reared in one defined broiler chicken production system

This is an open-book assessment.

Assessment Guidelines

This Outcome may be assessed by means of an assignment with a submission of about 2,000 words or equivalent plus supporting diagrams/sketches. The assignment could be based on an investigation of real production systems or, if this is not possible, based on photographic and management information.

Administrative Information

Unit code: F43D 34
Unit title: Poultry Welfare and Behaviour
Superclass category: SH
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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Poultry Welfare and Behaviour

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 Unit is intended to prepare candidates for work in a poultry production environment.

The poultry industry is the largest (in terms of animal numbers) and the most highly automated, vertically integrated and intensified of the animal production industries. As a consequence, there has been a great deal of public interest in the welfare of poultry, reinforcing the need for the industry to consider the behavioural needs of animals. At international level, animal welfare has taken much greater importance in recent years.

Welfare is important for all sectors of the poultry industry. This Unit will provide the knowledge and skills required by candidates to meet the responsibilities and best working practice methods for the large amount of legislation, including the Farm Animal Welfare Council's (FAWCs) Five Freedoms (from hunger and thirst, from discomfort, from pain, injury and disease, to express normal behaviour, and from fear and distress) relevant to the poultry industry. It is important that all candidates who become part of the poultry industry understand normal poultry behaviour, and the implications and effects of poor welfare. This will promote improved working practices and product quality. Consumer awareness and poor public perceptions make it important that the key points of legislation are understood and implemented by those responsible for poultry welfare.

Outcome 1 explores the normal patterns of the domestic fowl and abnormal behaviour patterns such as aggression. Candidates could for example, learn how to recognise signs of aggression, namely, strutting, high stepping, side and frontal display and retreat and understand their implications. The Outcome enables candidates to develop an understanding of the intricate nature of bird behaviour and gives them the knowledge required to ensure that any poultry in their care will have their behavioural needs recognised to the best of their ability. It is recommended that the commercially important abnormal behaviours considered include those associated with extreme (both high and low) levels of light, noise, heat and stocking density.

Outcome 2 builds on the knowledge from Outcome 1. Once a candidate has the ability to understand how poultry behave in situations of good welfare and health and also recognise the signs of poor health and wellbeing, they can detect any deterioration in the poultry's living conditions. This Outcome will require candidates to learn the fundamentals of bird welfare, the FAWC's Five Freedoms and to explore the welfare legislation which exists today to ensure that food safety and hygiene standards are maintained as well as standards for animal welfare and the environment.

Candidates could also progress to the more complex issue of stress in poultry and explain the physiological indices of stress eg short term (rapid breathing), medium term (increased adrenocorticotrophic hormone (ACTH) and longer term (decline in specific glandular activity) and behavioural indices of stress such as head-shaking or aggressive pecking.

Higher National Unit specification: support notes

Unit title: Poultry Welfare and Behaviour

Outcome 3 addresses the welfare issues and challenges that the increased demand for output and efficiency of poultry production has raised. Candidates will develop an understanding of the difficulties and differences that exist between extensive and intensive systems of poultry production and learn to use their own judgement to evaluate the systems for their impact on poultry welfare using the following key values: behavioural needs of the birds, spatial requirements, relevant legislation, government bodies/codes of recommendations, reference to the scientific community and knowledge of appropriate welfare pressure groups.

Candidates should be encouraged to consider the likelihood of some irreconcilable differences between production and welfare demands and how welfare might influence future change in poultry production.

Guidance on the delivery and assessment of this Unit

The Unit is specifically designed for use as part of a Group Award in poultry production and it is best studied in this context and, for a thorough understanding, candidates should be encouraged to consider behaviour and welfare issues in relation to current and emerging production techniques.

The Unit is expected to be delivered primarily in a classroom environment. However, candidates should be given the opportunity, if possible, to observe poultry in an intensive/extensive environment or failing this, centres could provide videos and DVDs of different poultry environments. Use can be made of welfare literature from a wide of sources particularly scientific journals and governmental publications. The inclusion of articles from the popular press and from animal welfare pressure groups will ensure a full discussion of this important and sometimes controversial area.

The assessment for Outcomes 1 and 2 may take the form of restricted and extended response questions and are closed-book, supervised assessments. It is important to vary the question types to avoid penalising individuals who have difficulty with a particular question form. It will also help avoid excessive brevity in responses if it is made clear which questions require extended responses and which short answers. Outcome 3 may be assessed by an open-book, investigative assignment.

Opportunities for developing Core Skills

The assignment developed for Outcome 3 requires the candidate to collect and collate data and prepare an evaluative submission involving complex value judgements. This should provide ample opportunity for the candidate to demonstrate the Core Skill component Written Communication (both reading and writing) to SCQF level 6: reviewing welfare literature from a wide of sources particularly scientific journals and governmental publications and the inclusion of articles from the popular press and from animal welfare pressure groups will ensure a full discussion of this important and sometimes controversial area, and will provide opportunities to develop the Core Skill Component Written Communication of the Core Skill *Communication* and the Core Skill Component Critical Thinking of the Core Skill *Problem Solving*, both at SCQF level 6.

Higher National Unit specification: support notes (cont)

Unit title: Poultry Welfare and Behaviour

Open learning

It is possible for the underpinning knowledge for this Unit to be delivered by open or distance learning. Access to an intensive and extensive poultry system would be advantageous though not essential. The assessments may be completed on-line, however, it will require planning by centres to ensure the sufficiency and authenticity of candidate evidence and ensure assessment conditions are met.

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: Poultry Welfare and Behaviour

Domestication of poultry has been a major part of agricultural development. Concerns over poultry welfare have increased as the intensification of agriculture has increased. Many people now realise the need for a greater understanding of poultry behaviour. In the course of this Unit, you will come to understand poultry ethology and behaviourism and you will use these to describe the different behaviour patterns found in birds. This Unit explores how these behavioural studies can be used to address welfare problems.

Poultry welfare means different things to different people because it has an ethical component. Ideally it should be the aim of all those working with poultry to ensure that they are looked after within the bounds of what is currently understood as being humane. It is important that all livestock producers and stock people understand the implications and effects of poor welfare. Consumer awareness and poor public perceptions are making it very important that the key points of legislation are implemented and understood. This Unit will give you a better understanding of these issues.

This Unit may be assessed using three instruments of assessment. Outcomes 1 and 2 cover fundamental underpinning knowledge and may be assessed by restricted and extended response questions. Outcome 3 may be assessed by an investigative assignment.

There are opportunities to develop the Core Skill component Written Communication of the Core Skill *Communication* and the Core Skill component Critical Thinking of the Core Skill *Problem Solving*, both at SCQF level 6 although there is no automatic certification of Core Skills or Core Skills components.