



## Higher National Unit Specification

**Unit Title:** Livestock Production Systems: Health and Welfare

**Unit Code:** F3V5 34

**Unit Purpose:** This Unit will equip candidates with the knowledge and skills required to understand the health and welfare implications for production systems used in UK agriculture. Through understanding the key issues in livestock production, it will enable candidates to assess the standards of health and welfare on livestock farms, and carry out handling tasks.

On completion of the Unit candidates will be able to:

- 1 Describe systems used in livestock production.
- 2 Describe significant health and welfare issues relating to selected livestock production systems.
- 3 Explain good welfare practice in selected livestock production systems.
- 4 Perform selected livestock handling tasks.

**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 the Unit is at the discretion of the centre. There is no specialist prior knowledge required, but it would be beneficial if candidates had achieved the HN Unit *Animal Welfare*, prior to undertaking this Unit, and/or had some prior experience of working with livestock.

**Core Skills:** There are opportunities to develop the Core Skills of *Communication* at SCQF level 6 in this Unit and the Core Skill *Working with Others* at SCQF level 5, 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:** Outcomes 1 and 2 could be assessed by a combined report. Outcome 3 could be assessed by candidates generating checklists for use during site visits. Outcome 4 consists of three practical livestock tasks.

## **Higher National Unit specification: statement of standards**

**Unit title:** Livestock Production Systems: Health and Welfare

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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 systems used in livestock production

#### **Knowledge and/or Skills**

- ◆ Production cycles
- ◆ Feeding systems
- ◆ Housing
- ◆ Equipment
- ◆ Handling facilities
- ◆ Terminology

#### **Evidence Requirements**

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

- ◆ describe systems used in livestock production for three from the following five classes of livestock: poultry, beef cattle, dairy cattle, sheep and pigs. The description must include a non-ruminant system and the production cycles, feeding systems, housing, equipment, handling facilities and terminology for all three systems.

#### **Assessment Guidelines**

The Outcome could be assessed by the collecting and reporting of information gathered on visits to livestock production Units. The assessment could be carried out either alone or in conjunction with Outcome 2.

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

**Unit title:** Livestock Production Systems: Health and Welfare

### **Outcome 2**

Describe significant health and welfare issues relating to selected livestock production systems

#### **Knowledge and/or Skills**

- ◆ Significant health issues
- ◆ Stock health plans
- ◆ Prevention and treatment
- ◆ Significant welfare issues
- ◆ Elimination and minimisation of welfare problems

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, for three livestock production systems:

- ◆ describe significant health issues. The description of issues for each system must include significant fungal, bacterial, viral, protozoal and metabolic disorders; prophylactic treatments and the use of stock health plans in the prevention and treatment of health issues.
- ◆ describe significant welfare issues. The description for each system must include nutrition, health, management, mutilations, parturition, housing and emergency precautions.
- ◆ describe at least three signs of poor welfare, the causes of poor welfare and the steps taken to eliminate and minimise welfare problems.

#### **Assessment Guidelines**

This Outcome could be assessed by candidates presenting information gathered from a variety of sources, including farm visits. This Outcome may be assessed either alone, or in conjunction with Outcome 1 by the submission of a single report covering the health and welfare issues for each of three systems covered in Outcome 1.

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

**Unit title:** Livestock Production Systems: Health and Welfare

### **Outcome 3**

Explain good welfare practice in selected livestock production systems

#### **Knowledge and/or Skills**

- ◆ Animal behaviour
  - Normal
  - Abnormal
- ◆ Welfare Conditions
  - Acceptable
  - Unacceptable
- ◆ Five Freedoms
- ◆ Legislation
- ◆ Codes Of Recommendation

#### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, for three livestock production systems:

- ◆ describe normal and abnormal animal behaviour.
- ◆ describe acceptable and unacceptable welfare conditions.
- ◆ explain good practice. The explanation must include consideration of the five freedoms, and current codes of recommendation and legislation.

#### **Assessment Guidelines**

This Outcome could be assessed by candidates preparing a suitable checklist (with room for comments) of behaviours and welfare conditions prior to farm visits; and accurately completing these during visits. Candidates could use checklists to explain examples of good practice in terms of the five freedoms, codes of recommendation and legislation.

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

**Unit title:** Livestock Production Systems: Health and Welfare

### **Outcome 4**

Perform selected livestock handling tasks.

#### **Knowledge and/or Skills**

- ◆ Condition scoring
- ◆ Livestock handling tasks
- ◆ Health and safety
- ◆ Handling equipment

#### **Evidence Requirements**

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

- ◆ carry out condition scoring on at least one species of farm animal using a recognised system used in the livestock industry.
- ◆ prepare for and perform two livestock handling tasks, using appropriate equipment, on at least two species of farm animal. The livestock tasks may be chosen from gathering and moving; applying a halter; ear tagging; dosing (oral or topical); weighing; docking (lambs only); dagging; milking (dairy cows); bedding and artificial feeding of calves or lambs.
- ◆ perform condition scoring and the two practical tasks showing due regard for the health and welfare of themselves, others and the animals.

Assessment must be performed under supervision.

#### **Assessment Guidelines**

The assessment consists of three practical tasks, one of which is condition scoring, all performed under supervised conditions. An observation checklist completed by the assessor that demonstrates that the practices, equipment and health and safety issues associated with the chosen tasks have been applied could be used; other means of recording evidence eg video could be utilised.

## Administrative Information

**Unit code:** F3V5 34

**Unit title:** Livestock Production Systems: Health and Welfare

**Superclass category:** SH

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### History of changes:

Version	Description of change	Date

**Source:** SQA

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## **Higher National Unit specification: support notes**

### **Unit title:** Livestock Production Systems: Health and Welfare

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**

Whilst the Unit may be delivered on a standalone basis, delivery and assessment could build on the knowledge and skills acquired in the HN Unit *Animal Welfare*.

This Unit introduces the main systems of livestock production in the UK and provides an overview of the main components of these systems. It provides candidates with knowledge and practical skills associated with livestock. Candidates will gain an understanding of health and welfare issues relating to various systems as well as knowledge and understanding of standards that are accepted throughout the industry.

Outcome 1 is designed to give candidates an overall knowledge of livestock production systems and the production cycles, feeding systems, housing, equipment, handling facilities and terminology associated with these systems. For the purposes of assessment, candidates are required to describe in detail three production systems one of which must be a non-ruminant system from poultry, beef cattle, dairy cattle, sheep and pigs (eg for beef production either suckler cows or a finishing system would be adequate). However, it would be beneficial if candidates are introduced to production systems for all five categories in order to allow as broad a choice as possible.

Outcome 2 provides candidates with the opportunity to acquire knowledge of a range of health and welfare issues that farmers are required to address. Prevention, symptoms and treatment for a range of health issues are covered. Candidates will become aware of the potential causes of welfare problems, the signs of poor welfare and how they can be eliminated or minimised.

Outcome 3 relies on candidates' observation skills in order to identify signs of poor health and welfare in the selected livestock production systems. Candidates should focus on what constitutes good practice, as well as the negative aspects of health and welfare. The 'five freedoms' and the relevant codes of recommendations for the welfare of livestock should be covered.

For Outcome 4, it is strongly recommended that candidates are provided with adequate demonstrations of the tasks before they carry out supervised practice, until the required standard is achieved. The health and safety aspects for candidates and the animals must be emphasised.

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

The Unit could be delivered using a mixture of lectures, tutorials, guided study and farm visits. Farm visits could take the form of guided tours by the farmer with tutor support. Candidates will be expected to gather information by listening, observation and asking relevant questions.

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

### Unit title: Livestock Production Systems: Health and Welfare

It will benefit candidates to visit, for example, more than one dairy farm to become aware of the variety of practices that exist between farms producing the same product. Early in the delivery of the Unit, candidates are likely to benefit from higher levels of tutor support but should be able to achieve the required level of competence after two or three farm visits.

Outcomes 1 and 2 could be combined as a single report that describes three livestock production systems and the significant health and welfare issues associated with these. The report must be at least 2,000 words in length to ensure adequate coverage of each of the three systems selected.

Outcome 3 could be assessed by candidates deriving checklists that identify good practice and complete these forms on site visits. The checklists could be used to explain good practice within the selected livestock production systems.

The use of practical demonstrations and supervised practice is a key part of the delivery of this Outcome 4. It may be helpful to align the checklist to accepted welfare standards, eg the Government's Code of Recommendations for the Welfare of Livestock.

### *Opportunities for developing Core Skills*

There are opportunities to develop the Core Skills of *Communication* at SCQF level 6 in this Unit and the Core Skill *Working with Others* at SCQF level 5, although there is no automatic certification of Core Skills or Core Skills components.

The delivery and assessment of this Unit may contribute towards the component Written Communication particularly by use of the suggested combined assignment as instrument of assessment for Outcomes 1 and 2. The general skills of the component are 'read, understand and evaluate written communication' for its reading element and 'produce well-structured written communication' for its written element.

Any preparation towards producing the assignment such as supplementary reading and research will facilitate development of the component's reading element, as candidates may examine a variety of information, relating to livestock issues. Similarly, the writing element of the component may be developed when dealing with these issues, such as considering animal welfare issues.

In both formative and summative assessment candidates should be encouraged to present all essential ideas/information and supporting detail in a logical and effective order; use a structure that takes account of purpose and audience and links major and minor points in ways which assist the clarity and impact of the writing; use conventions which are effective in achieving the purpose and adapted as necessary for the target audience and use spelling, punctuation and sentence structures which are consistently accurate.

These skills can be developed through formative activities, such as any short essays/reports on topics, without formal Core Skill certification.



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

### **Unit title:** Livestock Production Systems: Health and Welfare

There are opportunities to develop the Oral Communication component of the Core Skill of *Communication* at SCQF 6. This may be achieved through candidates gathering and collating information, especially on site visits. For example, candidates may be involved in questioning farmers, employers and employees to enhance learning for all Outcomes, or when conducting the practical requirements for Outcome 4.

There may be opportunities to develop the Core Skill of *Working with Others* at SCQF 5 as candidates throughout the Unit will have to cooperate and work with others during visits and in the performance of the practical tasks in Outcome 4.

### **Open learning**

This Unit may be delivered by open learning or distance learning. However, it is anticipated that the practical aspects of the Unit may make this very difficult and centres would have to make considerable arrangements for both delivery and assessment.

### **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](http://www.sqa.org.uk)).

## General information for candidates

### Unit title: Livestock Production Systems: Health and Welfare

This Unit will equip you with the knowledge and skills required to understand the production systems used in agriculture in the UK. Through understanding the key issues in livestock production, it will enable you to assess the standards of health and welfare on livestock farms, and carry out handling tasks. The Unit may be of use as an introduction should you be seeking to pursue a career working with farm livestock.

The Unit may be taken as a standalone Unit but forms part of the Animal Care HNC/HND. It would be beneficial to have achieved the HN Unit *Animal Welfare*, prior to undertaking this Unit.

The Unit has a practical focus and this may be reflected in the delivery of each Outcome with the use of a mixture of lectures, field trips, visiting speakers and practical demonstrations. There are four Outcomes within the Unit.

In Outcome 1 you will look in depth at a minimum of three livestock production systems from the following five classes of livestock: poultry, beef cattle, dairy cattle, sheep and pigs. You will look at non-ruminant systems, production cycles, feeding systems, housing, equipment, handling facilities and terminology for all three systems.

Outcome 2 considers the health and welfare issues associated with three selected livestock production systems, which may be those covered in Outcome 1. A combined report may be used to assess both Outcomes.

Outcome 3 considers welfare practice and may be assessed by your developing and using checklists to explain good practice.

Outcome 4 is a practical Outcome in which you will be expected to perform three livestock handling tasks, one of which will be condition scoring. These tasks will be performed under supervised conditions and you will be expected to prepare for and perform the tasks with due regard for the safety of yourself, others and the animal.

There may be opportunities to develop the Core Skill of *Communication* at SCQF level 6, and the Core Skill of *Working with Others* at SCQF level 5 in this Unit.