



National Unit specification: general information

Unit title: Sheep Production (SCQF level 6)

Unit code: H2N3 12

Superclass: SH

Publication date: February 2013

Source: Scottish Qualifications Authority

Version: 02

Summary

This Unit enables learners to develop specialist skills and knowledge required to work on a sheep Unit. Learners will learn about the annual routine of caring for the sheep flock. They will carry out a range of practical tasks required to maintain healthy and productive sheep and know how to monitor production and progress.

This is an optional Unit within the National Certificate in Agriculture (SCQF level 6) but is also available as a free-standing Unit.

Successful completion of this Unit may facilitate progression to further study of livestock or to related employment.

Outcomes

- 1 Describe the annual routine of sheep husbandry in a range of systems.
- 2 Carry out routine tasks to maintain healthy and productive sheep.
- 3 Monitor the production and progress of sheep.
- 4 Carry out selection of sheep for a given purpose.

Recommended entry

While entry is at the discretion of the centre, learners would benefit from having some knowledge of livestock. This could be evidenced by completion of the Unit *Livestock Husbandry, Health and Welfare* (SCQF level 6) or equivalent.

General information (cont)

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Credit points and level

1 National Unit 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.*

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill None

Core Skill component Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

Unit title: Sheep Production (SCQF level 6)

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 annual routine of sheep husbandry in a range of systems.

Performance Criteria

- (a) Identify breeds and classes of sheep.
- (b) Describe sheep breeding in a range of systems.
- (c) Describe appropriate sheep feeding in a range of systems.
- (d) Describe sheep housing in a range of systems.
- (e) Describe lamb finishing and marketing in a range of systems.

Outcome 2

Carry out routine tasks to maintain healthy and productive sheep.

Performance Criteria

- (a) Identify key factors in the maintenance of sheep health.
- (b) Administer medication to sheep in accordance with good farm practice.
- (c) Move, handle and restrain sheep in accordance with good farm practice.
- (d) Carry out hoof care in accordance with good farm practice.
- (e) Body condition score sheep.

Outcome 3

Monitor the production and progress of sheep.

Performance Criteria

- (a) Complete sheep records.
- (b) Calculate efficiency factors.
- (c) Compare flock performance in relation to national standards and benchmarks.

Outcome 4

Carry out selection of sheep for a given purpose.

Performance Criteria

- (a) Select sheep for a given purpose.
- (b) Explain the factors considered in the selection sheep for a given circumstance.
- (c) Prepare sheep for a given purpose.

National Unit specification: statement of standards (cont)

Unit title: Sheep Production (SCQF level 6)

Evidence Requirements for this Unit

Written and/or oral and performance evidence is required to demonstrate that the learners have achieved all of the Outcomes and Performance Criteria. Evidence must be obtained under supervised conditions at appropriate points throughout the Unit. Evidence can be generated holistically, or Outcome by Outcome.

For Outcome 1, learners must provide evidence of the following under closed-book conditions:

- ◆ Identification of at least two breeds or crosses suitable for breeding in a given system
- ◆ Description of preparation for the breeding cycle, including tupping management and body condition scoring
- ◆ Description of the importance of flushing pre tupping, and feeding requirements pre and post parturition
- ◆ Explanation of feeds and quantities at tupping, and pre and post parturition
- ◆ Description of the two benefits of internal and two benefits of external accommodation
- ◆ Description of the utilisation of waste from an indoor sheep flock
- ◆ Statement of market requirements in terms of fat, conformation, live weight and dead weight, and cleanliness

For Outcome 2, learners must provide evidence of the following under closed-book conditions:

- ◆ Identification of the causes, symptoms and treatment of five diseases or disorders of sheep
- ◆ Identification of the control and prevention of five diseases or disorders of sheep

Learners must provide performance evidence of the following under supervised conditions:

- ◆ Dosing and injecting a minimum of three sheep
- ◆ Moving, handling and restraining a minimum of three sheep
- ◆ Inspection and trimming of at least one sheep's feet as appropriate
- ◆ Condition scoring of a minimum of five ewes and five lambs

Learners must provide evidence of the following under supervised, open-book conditions:

- ◆ Completion of one management and one compulsory sheep record
- ◆ Calculation of four efficiency factors (ewe to ram ratio, lambing percentage, barren percentage, mortality rate)
- ◆ Comparison of the four stated efficiency factors with target with national standards and benchmarks

National Unit specification: statement of standards (cont)

Unit title: Sheep Production (SCQF level 6)

For Outcome 4, learners must provide evidence of the following under supervised conditions:

- ◆ Selection of sheep for a given purpose
- ◆ Explanation of selection and grouping of sheep for sale in relation to size, weight and appearance
- ◆ Preparation of sheep for a given purpose is in accordance with market requirements

National Unit specification: support notes

Unit title: Sheep Production (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 Agriculture (SCQF level 6) but can also be taken as a free-standing Unit.

In this Unit learners will develop a range of skills and knowledge required to work on a sheep Unit. It would be beneficial for learners to have some prior knowledge of livestock.

Learners will learn about the annual routine of sheep husbandry in a range of systems, and how to maintain healthy and productive sheep, as well as how to monitor the production and progress of sheep and prepare them for a given purpose.

This Unit will help prepare learners for progression to Higher National Units in agriculture, or other related land-based qualifications or related employment.

Outcome 1 will provide learners with underpinning knowledge in relation to the annual routine of sheep husbandry in a range of systems. This would include hill, upland and low-land breeds and systems, and cover crosses, terminal sire, preparation for tupping, service, breeding season, early, Easter and late lambing systems, easy care systems, pregnancy and parturition management, factors associated with parturition, care of ram, selection of ram and ewes for breeding, ram management, raddling, ram: ewe ratio, indoor and outdoor lambing, and body condition scores to the nearest point.

Learners will learn about periods of high and low feeding requirements, flushing prior to service, forage and concentrates, timing and introduction of feeds, importance of protein, quantity and quality of feeds, feeding routine, feeding area, rations for ewes carrying triplet, twins and singles, vitamins and mineral supplements, storm feeding, and methods of feeding. They should also gain awareness of indoor and outdoor shelter, slats and straw bedded floors, ventilation, handling facilities, waste handling (including cull stock), storage of farmyard manure, access to water, feed troughs and feed racks.

Learners should be able to differentiate between different market outlets such as store, fat, breeding replacements (ewe lambs/gimmers), and the grouping of stock in relation to sex, live weight gain, pedigree, commercial grades (fat and conformation). Rate of maturity, slaughter age and weight, food conversion efficiency, liveweight and deadweight requirements, and niche markets should also be covered.

National Unit specification: support notes (cont)

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Outcome 2 will provide learners with the opportunity to develop practical skills in relation to the maintenance of sheep health. Learners should be able to describe sheep health with reference to bacterial, viral, fungal and nutritional diseases as well as internal and external parasites. They will also be expected to carry out a range of tasks including administration of oral anthelmintics, systemic pour on treatments, subcutaneous and intra muscular injections, foot trimming and foot bathing, handling, restraining and weighing sheep, body condition scoring, identifying signs of good and ill health, and overall appearance and behaviour.

Outcome 3 provides learners with underpinning knowledge in relation to monitoring the production and progress of the sheep flock. Learners should know how to maintain and complete compulsory records including identification, medicines and movement records. Management records such as lambing percentages, deaths, ewe to ram ratios, tugging date, sales, etc. should also be covered.

Learners should be able to calculate efficiency factors which could include lambing percentages, mortality rates, and ewe to ram ratios, and compare these figures to set targets and compare/benchmark these figures to national standards.

Outcome 4 enables learners to identify, select and prepare sheep for given purposes eg fat lamb, store lamb, breeding ewe lambs or gimmers, pedigree females or males and cast and cull ewe markets. They should be able to group stock in relation to age, size, type, height, breed, length, over or under shot jaw, testicles, teeth, udders, and overall conformation in relation to the EUROP system. Knowledge of dead weight and live weight outlets should be covered with reference made to cleanliness of animals, particularly for the slaughter market.

This Unit is broadly aligned to the following National Occupational Standards (NOS) for Livestock Production, from Lantra:

- LP1 Assist with preparing and maintaining livestock accommodation
- LP4 Establish and maintain conditions appropriate to the welfare of livestock
- LP5 Assist with maintaining the health and well-being of livestock
- LP7 Provide feed and water to livestock
- LP32 Monitor and maintain the selection of livestock, and prepare them for transfer

Guidance on learning and teaching approaches for this Unit

The Unit should be delivered in as practical a context as possible with delivery taking place on site to study sheep enterprises and in a classroom setting to study the underpinning theory. The emphasis should always be on the practical application of knowledge and understanding.

Tutors must ensure that ensure that learners adhere to appropriate health and safety guidelines in all practical activities.

National Unit specification: support notes (cont)

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Learners would benefit from a balanced approach to learning by undertaking farm visits to sheep Units, and participating in classroom activities to develop knowledge and understanding of sheep production and marketing stock. Working in groups, various systems can be compared, and group and individual work can be included for practical sessions.

By adopting the above learning and teaching approaches and/or through the Outcomes and corresponding Evidence Requirements, the Unit should provide learners with an opportunity to develop the following essential skills for life, learning and work:

- ◆ Employability — through developing practical skills in line with good farm practice and working on time limited tasks
- ◆ Sustainability — through considering the use of resources and recycling, etc
- ◆ Technical skills — through handling stock
- ◆ Organisational skills — in terms of personal management through punctuality, record keeping, etc
- ◆ Interpersonal skills — through contact with farm staff and in class groups

Guidance on approaches to assessment for this Unit

Both the practical and written/oral elements of the Unit lend themselves to holistic assessment approaches. The following approaches to assessment are suggested:

- Outcome 1: This could be assessed by short answer or restricted response questions.
Outcome 2: This could be assessed by short answer questions, and a series of practical exercises supported by an assessor observation checklist.
Outcome 3: This could be assessed by an assignment.
Outcome 4: This could be assessed by practical exercises and a written and/or oral assignment covering the reasons for selection of stock.

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 social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner 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)*.

National Unit specification: support notes (cont)

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Opportunities for developing Core Skills

In this Unit learners will develop knowledge and skills in how to successfully rear and finish stock in a sheep production system, through the knowledge of husbandry, and monitoring of progress in a range of systems, coupled with practical skills through carrying out various stock tasks. Learners will:

- ◆ Describe and explain key aspects of the husbandry of sheep
- ◆ Suggest appropriate disease control, prevention and treatment methods
- ◆ Select feed types and quantities
- ◆ Monitor sheep production and progress
- ◆ Carry out a range of practical tasks in accordance with good farm practice
- ◆ Make calculations and comparisons
- ◆ Select sheep for a given purpose

This means that as they are doing this Unit, learners may develop aspects of the Core Skills of *Communication, Numeracy and Problem Solving*.

In addition, aspects of the following Core Skills could be developed where particular learning and teaching approaches are adopted:

- ◆ *Working with Others* — through group work eg stock handling
- ◆ *ICT* — through recording data electronically, and carrying out calculations

This Unit has the Critical Thinking component of Problem Solving embedded in it. This means that when candidates achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5.

Disabled learners and/or those with additional support needs

The additional support needs of individual learners 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

History of changes to Unit

| Version | Description of change | Date |
|---------|---|------------|
| 02 | Core Skills Component Critical Thinking at SCQF level 5 embedded. | 04/02/2013 |
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