

Next Generation Higher National Unit Specification

Integration of Trees on Farm (SCQF level 8)

Unit code: J7AH 48

SCQF level: 8 (8 SCQF credit points)

Valid from: session 2023–24

Prototype unit specification for use in pilot delivery only (version 1.0) September 2023

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

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Unit purpose

This unit gives learners the knowledge and skills they need to understand the use and value of trees to farms or agricultural businesses, and how trees can be integrated within these businesses for specific functions. While learners do not need to have previous skills or experience before they start the unit, we recommend they have a good knowledge of farming systems to allow them to focus on the integration of trees within these systems and farming businesses.

The unit is part of the Higher National Diploma (HND) in Agriculture.

If learners study the unit as part of HND Agriculture, they may be able to progress to related degree-level study. Alternatively, they may want to go directly into employment in an agricultural business.

Unit outcomes

Learners who complete this unit can:

- 1 describe the function of trees on farms or in agricultural businesses, and how they can be integrated
- 2 evaluate the benefits of using trees on farms or in agricultural businesses

Evidence requirements

Outcome 1

Learners must provide evidence, from at least one of the four main areas below, to show they can:

- describe the functions trees can have on a farm or agricultural business
- describe, in a case study, how trees can be integrated into an existing farm or agricultural business

The four main areas are:

- 1 functional use of trees: shelter, shade, windbreaks and boundary definition
- 2 landscape improvements: biodiversity and ecosystem benefits
- 3 environmental benefits: climate change, soil and water management; carbon credits
- 4 cropping: saleable timber or wood fuel

Outcome 2

Learners must provide evidence to show they can:

• evaluate the benefits of using trees on farms or in agricultural businesses

Learners should produce a review of a farm or agricultural business, and a proposal explaining how integrating trees could benefit that business.

Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes:

Knowledge	Skills		
Outcome 1	Outcome 1		
Learners should understand:	Learners can:		
 the functions of trees on farms and in agricultural businesses integration within systems and/or businesses 	 describe the main uses and value of trees on a working farm or in an agricultural business describe how these uses and value can be integrated with existing business 		
Outcome 2	Outcome 2		
Learners should understand:	Learners can:		
 how to evaluate the potential of integrating trees into a current business 	 review a farm or agricultural business and explain the potential value of integrating trees, or more tree functions, in that business 		

Meta-skills

Throughout the unit, learners develop meta-skills to enhance their employability in the agriculture sector.

Self-management

This meta-skill includes:

- focusing: filtering information for assessment and research tasks
- adapting: learning about and being open to new ideas

Social intelligence

This meta-skill includes:

- communicating: developing skills in listening and receiving information while visiting farms, and working in a group to present findings
- collaborating: building strong peer-to-peer relationships through group activities and presentations

Innovation

This meta-skill includes:

- curiosity: asking questions in a classroom setting, during business managers' visits, and on farm and agricultural business visits
- creativity: considering different ways to integrate trees into businesses

Literacies

Numeracy

There is no direct learning of numeracy in this unit. However, learners can cover aspects of costs, income and funding potential related to trees within farming systems. Learners could also look at calculating trees as a value for carbon credits.

Communication

Learners develop communication skills by attending field visits and having discussions with farmers and business managers. They can also develop their writing and presentation skills through the assessment.

Digital

Learners develop digital skills and computer literacy by carrying out research and using word-processing or presentation software to create their assessment responses.

Delivery of unit

This unit is part of HND Agriculture.

Additional guidance

The guidance in this section is not mandatory.

Approaches to delivery

You can deliver this unit as a mix of lectures, tutorials and farm visits. You should carefully select farm visits to demonstrate helpful examples of the many uses of trees on a farm. You should ensure that learners have access to the necessary information during farm visits to adequately describe the use of trees within the four main categories given in outcome 1.

You could then arrange a second visit to a farm or agriculture business, perhaps in conjunction with one relating to one of the mandatory units, in which trees are perhaps not as integrated into the business. Learners could then put their knowledge into practice and assess the potential uses and values of trees, and how they could be integrated to benefit that business.

You may also want to look at using trees to capture carbon and generate value as carbon credits.

Approaches to assessment

Outcome 1

Learners could produce a written report and/or case study of approximately 500 words on the function and integration of trees on a farm or in an agriculture business.

Outcome 2

Learners could produce a written report and/or case study of approximately 1,000 words. Alternatively, they could do a 10-minute presentation, followed by 5 minutes of questions, on their review of a farm or agricultural business and proposal explaining the potential for integration of trees. They could also prepare and deliver the presentation as a group task.

You may want to assess outcome 2 together with that of another outcome within the mandatory units to help reduce the assessment load.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page: www.sqa.org.uk/assessmentarrangements.

Information for learners

Integration of Trees on Farm (SCQF level 8)

This information explains:

- what the unit is about
- what you should know or be able to do before you start
- what you need to do during the unit
- opportunities for further learning and employment

Unit information

This unit gives you the knowledge and skills you need to understand the use and value of trees to a farming or agricultural business, and how trees can be integrated within the business for specific functions.

While you do not need any specific skills or previous experience before you start the unit, we recommend that you have a good knowledge of farming systems, to allow you to focus on the integration of trees within these systems and farming businesses.

The unit gives you the knowledge and skills to:

- describe the functions trees can have on a farm or in an agricultural business
- describe how trees can be integrated into an existing farm or agricultural business
- evaluate the potential uses of trees on farms or agricultural businesses

On completing the unit, you can:

- 1 describe the functions of trees on farms or in agricultural businesses, and how they can be integrated
- 2 evaluate the benefits of using trees on farms or in agricultural businesses

The unit involves several field visits to a range of farms. You must collect and prepare reports on the information you gather on these visits. You use this information to create a report on the use of trees on a farm and how you would integrate them, and a further report or presentation describing the benefits and value to that business of integrating trees. You are assessed on these two reports and/or presentations. Your lecturer may assess outcome 2 together with that of another outcome within the mandatory units.

Throughout the unit, you develop meta-skills to enhance your employability in the agricultural sector. There are opportunities to develop meta-skills in:

- ♦ self-management
- ♦ social intelligence
- ♦ innovation

If you study the unit as part of HND Agriculture, you may be able to progress to related degree-level study. Alternatively, you may want to go directly into employment in an agricultural business.

Administrative information

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Superclass:	SL

History of changes

Version	Description of change	Date

Note: please check <u>SQA's website</u> to ensure you are using the most up-to-date version of this document.

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