



National Unit Specification

General information

Unit title: Beekeeping: An Introduction (SCQF level 5)

Unit code: HP9P 45

Superclass: SH

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Version: 01

Unit purpose

This unit is designed to provide an introduction to the basics of beekeeping including the identification and use of equipment and the subduing and manipulation of colonies of bees.

This unit is suitable for those interested in beekeeping and who wish a basic introduction to the practice of apiculture.

This unit is part of the NPA in Beekeeping but could also be delivered as a stand-alone unit.

Outcomes

On successful completion of the unit the learner will be able to:

- 1 Explain the range and uses of beekeeping equipment.
- 2 Identify nectar and pollen producing plants.
- 3 Describe how to subdue and handle bees.
- 4 Describe the principal pests and diseases affecting bees in the UK.

Credit points and level

1 National Unit credit at SCQF level 5: (6 SCQF credit points at SCQF level 5)

Recommended entry to the unit

Entry to this unit is at the discretion of the centre.

National Unit Specification: General information (cont)

Unit title: Beekeeping: an introduction (SCQF level 4)

Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the support notes of this graded unit specification.

There is no automatic certification of Core Skills or Core Skill components in this graded unit.

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.

This unit can be delivered as part of the NPA Beekeeping or as a stand-alone unit.

Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

National Unit Specification: Statement of standards

Unit title: Beekeeping: an introduction (SCQF level 5)

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 the range and uses of beekeeping equipment.

Performance criteria

- (a) Identify and describe the component parts of the following:
 - ◆ British Modified National Hive
 - ◆ Smith Hive
 - ◆ Langstroth Hive
 - ◆ A double walled hive, for example the William Broughton Carr (WBC).
- (b) Contrast the use of single and double walled hives with regard to cost, manipulation and transportation.
- (c) Identify the types of wax foundation and frames suitable for different purposes.
- (d) Explain the function and use of bee escape devices for clearing honey supers.
- (e) Describe the means of protecting bees from pest attack during the inactive season.
- (f) Identify protective equipment worn by beekeepers.

Outcome 2

Identify nectar and pollen producing plants.

Performance criteria

- (a) Identify the principal spring, summer and autumn flowers which are generally available, in the UK and form the main sources of pollen and nectar.
- (b) Explain the influence of weather and availability of forage on the potential for bees to gather nectar surplus to their own maintenance requirements.

Outcome 3

Describe how to subdue and handle bees.

Performance criteria

- (a) Describe the reasons for making a hive inspection.
- (b) Describe the environmental conditions conducive to successful manipulations of bees.
- (c) Describe the methods of subduing and controlling bees.
- (d) Identify the queen, worker and drone bees, and the different wax cells within the colony.
- (e) Explain the difference between brood cells, honey stores and stored pollen.

National Unit Specification: Statement of standards (cont)

Unit title: Beekeeping: an introduction (SCQF level 5)

Outcome 4

Describe the principal pests and diseases affecting bees in the UK.

Performance criteria

- (a) Describe the pests and diseases to which the brood and adult bee are susceptible, and identify which are notifiable.
- (b) Describe the symptoms and effects of the principle bee diseases.
- (c) Describe likely treatment and control for the principle bee diseases.

Evidence requirements for this unit

Evidence is required to demonstrate that learners have achieved all outcomes and performance criteria.

Outcome 1

Written and/or recorded oral evidence is required of the learner's ability to:

- ◆ identify and explain the use of 20 separate items of beekeeping equipment from the following categories:
 - clothing (to include bee suit, bee gloves and appropriate footwear)
 - tools
 - hives (to include British Modified National Hive, Smith Hive, Langstroth Hive and at least one double walled hive).
- ◆ explain the differences between the hives in terms of cost, manipulation and transportation.
- ◆ identify wax foundations and frames suitable for a range of purposes.
- ◆ describe the function and use of bee escape devices.
- ◆ describe the means of protecting bees from pest attacks during the inactive season.

Outcome 2

Written and/or recorded oral evidence is required of the learner's ability to:

- ◆ identify the principal nectar and pollen producing plants available locally and nationally.
- ◆ identify the principal spring, summer and autumn flowers which are available generally, in the UK and form the main sources of pollen and nectar.
- ◆ explain the effect of weather and availability of forage on nectar supply.

National Unit Specification: Statement of standards (cont)

Unit title: Beekeeping: an introduction (SCQF level 5)

Outcome 3

Written and/or recorded oral evidence is required of the learner's ability to:

- ◆ identify five reasons for making a hive inspection.
- ◆ describe the environmental conditions conducive to the successful manipulations of bees.
- ◆ describe the principal method of subduing bees prior to manipulation.
- ◆ identify the queen, workers and drone bees within the colony.
- ◆ identify the difference between broodcells, honey stores and stored pollen.

Outcome 4

Written and/or recorded oral evidence is required of the learner's ability to:

- ◆ identify the principle pests and diseases and how they affect bees in UK.
- ◆ identify notifiable diseases.
- ◆ describe likely treatment for the principal pests and diseases.



National Unit Support Notes

Unit title: Beekeeping: an introduction (SCQF level 5)

Unit support notes are offered as guidance and 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 has been created to run parallel to and complement the existing Scottish Beekeeper Association training. Although this unit is an introduction, when delivered in association with the other units of the NPA Beekeeping course it will also help to prepare learners for the SBA Basic Beekeeping Exam. Learners wishing to undertake this examination should register with the SBA. Further information can be found on their website or at: <https://www.scottishbeekeepers.org.uk/learn/exams-dates-fees>.

Guidance on approaches to delivery of this unit

Although the majority of this unit could be delivered in a simulated environment, it is important that any practical aspects of learning take place under the supervision of experienced and qualified apiculturists. Partnerships with land based education providers, beekeeping associations or training providers are likely to provide the most appropriate settings. Prior to commencement, a risk assessment should be conducted of the site to be used, as well as any personal protective equipment that could be required.

Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners. The teaching and practical training for all outcomes may involve group work but all written records must be the work of the learner personally.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Outcome 1 could take the form of a recorded practical assessment with a checklist, or a written examination with photographs. Outcome 3 could take the form of a practical exam with a checklist, this could be via a checklist using a model hive and a set of clear photographs, or with an active hive under close supervision. It could also be a written exam in closed book conditions. The pass mark for both could be set at 80%.

National Unit Support Notes (cont)

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Outcome 2 could be a portfolio of evidence, either of photographs, sketches, pressed samples or similar. Two examples from spring and two from summer/autumn. This portfolio should include a short section explaining how weather affects forage.

Learners could compile notes and information recorded in field study trips and illustrate these notes by sketches, photographs or other means. A written report on how the weather condition affect forage should be included within the portfolio.

Outcome 4 could take the form of a short report.

Opportunities for 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. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at

www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

There is no automatic certification of Core Skills or Core Skills components in this Unit however, there may be an opportunities to develop the core skill of *Information and Communication Technology (ICT)*, *Numeracy*, *Communication* and *Working with Others* at SCQF level 5 as part of this unit.

History of changes to unit

Version	Description of change	Date

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General information for learners

Unit title: Beekeeping: an introduction (SCQF level 5)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is designed to provide you with an introduction to the basics of beekeeping and includes the identification and use of equipment, and understanding the subduing and manipulation of colonies of bees.

On completion of this unit you will be able to:

- ◆ explain the range and uses of beekeeping equipment.
- ◆ identify nectar and pollen producing plants.
- ◆ describe how to subdue and handle bees.
- ◆ describe the principal pests and diseases affecting bees in the UK.

This unit is suitable for you if you are interested in beekeeping and wish a basic introduction to the practice of apiculture.

This is a stand-alone unit but also makes up part of the NPA in Beekeeping. Upon successful completion of this unit, you may wish to go onto complete the NPA, or if studying further with the Scottish Beekeepers' Association, to take the formal SBA Basic Beekeeping examination.