The British Beekeepers' Association

Examinations Board



General Certificate in Beekeeping Husbandry

2025 SYLLABUS AND INFORMATION PACK

© BBKA EXAMINATIONS BOARD V1: January 2025

BBKA Examinations Board

Application & Assessment Procedure for: The General Certificate in Beekeeping Husbandry

Applicable for Assessments: 2025

Aims

To encourage existing beekeepers to improve their understanding and practice of beekeeping.

The candidate will be able to demonstrate a broad range and understanding of beekeeping skills and will be required to show that their management of colonies is aimed at producing a strong healthy force of foraging bees for the expected honey flows and that the resultant crop is processed for consumption in a hygienic manner with due regard to legal requirements.

Conditions of Entry

The candidate must be a registered, partner or honorary member of the BBKA.

The candidate shall have managed at least one colony of bees for a minimum of five years.

A link for the online application form should be requested from the Area Association Examination Secretary. Direct members are to contact the Examinations Board Secretary on sec.exams@bbka.org.uk.

Applications close on the 28th February in the year the Assessment is to be taken. The online application and fee shall have been received by the Examinations Board Secretary prior to the closing date. The 2025 fee for the assessment is £90.

Applications made after the closing date are not permitted. Any candidates who take the assessment without following the correct entry procedure will deem the assessment invalid. Retrospective entries will not be accepted.

Preparation and Equipment Required for the Assessment

The candidate will prepare their apiary to show their approach to general beekeeping, queen rearing and swarm control. The candidate may decide to attend a series of lectures, join a study group or follow private study using standard texts to prepare for the assessment. Suggested texts and specialist leaflets are listed in the reading list. In addition, the candidate will be required to have kept records of activities in the apiary for at least twelve months. Guidance notes on maintaining beekeeping records are available from the BBKA and are recommended for all beekeepers even if they are not taking this assessment.

When planning to take this assessment the Examinations Board recommends that candidates manage more than three colonies so that if something goes wrong beforehand such as a colony swarms or perhaps dies out over winter the candidate will still have three queen-right honey production colonies for the assessment.

The assessors will examine the candidates' method of queen rearing. This does not need to include grafting techniques but will demonstrate that the candidate is using a specific queen rearing method and not relying on the use of naturally occurring swarm cells. Photographs and equipment used should be made available if appropriate. The candidate shall have a queen rearing procedure

underway at the time of the assessment to demonstrate their ability to rear queens suitable for the needs of their apiary.

The candidate will ensure the following equipment is ready prior to the assessment, for inspection by the assessors, and ready for immediate use:

- A minimum of three honey producing, queen-right colonies of honey bees It is desirable that the candidate's colonies are good tempered and do not follow more than about five metres from their hive.
- A honey producing colony is a queen-right colony of honey bees containing brood in all stages on more than seven national frames, or equivalent for other hive types, and at least one super containing some capped honey collected by that colony.
- One queen-right nucleus colony of honey bees suitable for developing into a colony.
- Sufficient spare equipment for the below tasks:

Preparing colonies for moving elsewhere.

Feeding the colonies.

To produce an artificial swarm.

Queen introduction.

Queen marking and clipping.

Swarm collection.

Undertaking a Bailey Comb Change.

The candidate will also have the below items available for the assessment:

- Honey and wax processing and packing equipment.
- A minimum of three jars of liquid and three jars of set honey, labelled as for sale, in accordance with the current food labelling regulations. The assessors may choose to sample the honey provided.
- Blocks of wax suitable for retail sale.
- Personal protective equipment.

The Assessment

Two assessors approved by the Examinations Board will conduct the assessment at the candidate's apiary.

The assessment will normally be conducted in May, June or July and will last about three hours. This does not include any travelling to out apiaries or lighting smokers or the preparation in advising the candidate of the tasks to undertake at the apiary. Where candidates have multiple apiaries, the assessors should not be expected to visit more than two apiaries. The candidate's understanding of beekeeping, as covered in the syllabus will be assessed through a discussion with the assessors who will use the candidate's records as the basis of the assessment and to decide which colonies to use for each task. The candidate shall make their records available to the assessors on the day of the assessment.

The assessors will test practical skills and knowledge of the important aspects of beekeeping and bee products, as defined in the syllabus. The assessors will observe the candidate's practical skills at opening and manipulating colonies and note the correct use of beekeeping equipment and apiary hygiene. Honey preparation facilities will be inspected, and the candidate will describe their procedures for extracting and packaging honey.

The assessment consists of four parts. The candidate must pass all sections to be awarded a pass. The parts are:

- Handling and General Management.
- Queen Rearing.
- Four Practical Tasks.
- Honey Bee Products and Discussion.

The assessors will look for a satisfactory method of controlling the bees and proficient manipulation of colonies during the required demonstrations.

Assessors will use standardised assessment sheets supplied by the Examinations Board so that the outcome may be moderated.

The Examinations Board may wish a trainee assessor or member of the Examinations Board to be present as an observer.

The length of the assessment should not normally exceed three hours excluding time for travel between apiaries. The final date for an assessment is 31st August.

In no case will an assessor indicate to a candidate the probable result of the assessment. This decision rests with the Examinations Board.

Guidance for Applicants

Candidates should request an online application link from their Area Association Examination Secretary. Direct members should contact the Examinations Board Secretary for the online link. A confirmation email will be sent to the candidates once the application has been processed.

Candidates with additional support needs are to annotate this on the application form. An additional support form will be sent with the application confirmation. It is the candidate's responsibility to return this form with supporting evidence to the Examinations Board Secretary.

The Examinations Board Secretary will appoint the assessors. The lead assessor will contact the candidate to arrange a mutually suitable date and time for the assessment to take place.

It is the responsibility of the candidate to supply a valid email address when applying.

The candidate will normally be informed of the outcome via email from the Examinations Board Secretary within six weeks of the assessment. The certificate will be sent to the Area Association Examination Secretary for presentation to the successful candidates.

Further information regarding assessment procedures can be found in the Examinations Board Procedure Manual, available to all members on BBKA Learning Online.

Any questions regarding the assessment or entry process should be directed to the Examinations Board Secretary on sec.exams@bbka.org.uk.

BBKA Examinations Board

Syllabus for: General Certificate in Beekeeping Husbandry

Applicable for Assessments: 2025

1.0 TASKS TO PERFORM

The candidate shall be able to demonstrate four of the below tasks selected by the assessors:

- 1.1 The inspection of a brood comb for brood diseases.
- 1.2 The procedures for creating an artificial swarm other than using a nucleus.
- 1.3 How to prepare a colony for moving to another apiary.
- 1.4 Preparation of a nucleus colony for the purpose of swarm control, sale, increase or queen mating as advised by the assessors.
- 1.5 The uniting of two colonies and the precautions that need to be taken.
- 1.6 Changing brood frames for disease control using a Shook Swarm technique.
- 1.7 Changing all brood frames in a strong colony, keeping the existing brood.
- 1.8 Changing brood frames for disease control in a weak colony using a Bailey Comb Change.

During the apiary visit, the candidate may also be required to demonstrate:

- 1.9 Taking a sample of adult bees for diagnosis.
- 1.10 The methods taken throughout the year to monitor and control varroa to non-damaging levels. The use of varroa control equipment in the apiary. How to examine a brood chamber and floor for varroa. The use of comb for trapping mites in drone cells.
- 1.11 The procedure for comb renewal and explain the reasons for this.
- 1.12 How beeswax is recovered with reference to the actual equipment used.
- 1.13 The equipment used to refine beeswax to produce blocks suitable for retail sale.

© BBKA EXAMINATIONS BOARD V1: January 2025

2.0 QUEEN REARING

The Candidate will be required to:

- 2.1 Demonstrate marking and clipping a queen. Candidates can use a drone as a substitute if appropriate.
- 2.2 Demonstrate a successful method of queen rearing. The reasons for selecting a particular queen as breeding material are required.
- 2.3 Review the age of existing queens and plans for their replacement. Describe how replacement of queens is carried out.
- 2.4 Describe the procedures used up to the time of the assessment in the queen rearing method demonstrated and explain what has yet to be done. Describe what is intended for the queens that have successfully mated. Describe the procedure that will be adopted to introduce queens into a colony.
- 2.5 Describe the advantages of marking and clipping queens

3.0 PRACTICAL BEEKEEPING

The candidate will be able to discuss and show an understanding of:

- 3.1 The progress of the colonies as described in the hive records and the intentions for the rest of the season.
- 3.2 The influence of honey production on apiary procedures.
- 3.3 The factors that may initiate swarming and the indications that a colony is preparing to swarm. The economic and social effects of swarming and the procedures that are used to control swarming.
- 3.4 The procedures for adding supers to colonies.
- 3.5 Methods of beekeeping and how these are influenced by local conditions. Reference will be made to the choice of hives from those types commonly in use in the area, the merits of top and bottom bee space and apiary equipment.
- 3.6 The associated dangers of robbing and methods to prevent robbing and to end robbing once started.
- 3.7 The methods used to minimise drifting and circumstances when diverting bees to another colony can be an advantage.
- 3.8 The situations that may result in honey bees becoming a nuisance to the public or livestock.
- 3.9 The procedures used to prepare a nucleus colony and discuss the many uses for a nucleus colony.
- 3.10 The procedures used for moving a colony a short distance within an apiary and to another site beyond normal flying distance, including the difficulties and dangers involved.
- 3.11 The procedures for general maintenance including preservation of hives, fumigation of comb and equipment, prevention of wax moth damage, the use of predator guards, storing combs and general apiary hygiene.

- 3.12 How super combs are stored, and the measures taken to combat wax moth.
- 3.13 The methods and reasons for feeding sugar syrup, candy, pollen and pollen substitute.
- 3.14 How colonies are prepared for winter and the timing of carrying out these arrangements.
- 3.15 The actions required to deal with a vicious stock of bees.
- 3.16 The circumstances in which it may be necessary to kill a colony and how this should be done.

4.0 NATURAL HISTORY AND BEHAVIOUR

The Candidate will be able to describe the following and explain their relevance to practical beekeeping:

- 4.1 The different races of honey bees and their characteristics.
- 4.2 The main external features of the drone and the two female castes.
- 4.3 The function of the hypopharyngeal glands, the Nasonov gland and the wax glands.
- 4.4 The factors in the production of brood, which result in workers, drones and queens.
- 4.5 The mating of drones with queens.
- 4.6 The main stages in the development of the brood from egg to emerging adult and the life expectancy of workers, drones and queens.
- 4.7 The changing circumstances throughout a year that influences the egg laying of a queen, indicating how the numbers will vary.
- 4.8 The nutritional requirements of honey bees and their main sources.
- 4.9 The signs in a colony of a drone laying queen and laying workers. Explain how these may arise and how they may be dealt with.
- 4.10 The seasonal variation in the hive population during a year including survival behaviour in winter.
- 4.11 The effect of weather on a colony and foraging.
- 4.12 The type of work done by a worker honey bee throughout its life including reference to summer and winter adapted bees.
- 4.13 The collection of nectar and how it is converted into honey suitable for storing in sealed comb.
- 4.14 The collection of pollen and how it is carried to the colony and used.
- 4.15 The production of wax and how it is used in the colony.
- 4.16 The collection of water and propolis and how they are used in the hive.
- 4.17 The factors that may give rise to swarm, supersedure and emergency queen cells.
- 4.18 The use made by honey bees of the alarm pheromones and the effect these have on the way bees are managed.

5.0 FORAGING

The Candidate will be able to demonstrate an understanding of:

- 5.1 The main plants of local importance to the bees throughout the year, giving details of flowering times.
- Any measures taken by the candidate to enable the bees to forage on a particular crop and any special action needed because of foraging on local crops, or a crop to which bees have been taken. Rape, heather and borage are three possible examples.
- 5.3 Honeydew, being able to name sources, and describe the impact of honeydew in the candidate's local area.

6.0 HYGIENE, DISEASES, PESTS AND POISONING

The Candidate will be able to:

- 6.1 Discuss the routine measures taken to look for disease in a colony.
- 6.2 Describe the role of good hygiene in the apiary. The candidate will demonstrate satisfactory procedures, both with personal effects and apiary equipment. Spare equipment used by the candidate will be examined.
- 6.3 Describe the appearance of healthy brood and, in contrast, the appearance of larvae, brood pattern and cell capping that will require further investigation.
- 6.4 Describe the procedures taken to avoid or reduce the transmission of infectious diseases and demonstrate that these are followed.
- 6.5 Describe the signs of American Foul Brood (AFB) and its effects on the colony.
- 6.6 Describe the signs of European Foul Brood (EFB) and its effects on the colony.
- 6.7 Describe what actions shall be taken to comply with statutory requirements if a brood disease is suspected.
- 6.8 Describe how to distinguish between Varroa destructor and Braula coeca.
- 6.9 Describe the method adopted in the Candidate's apiary to monitor and control Varroosis.
- 6.10 Discuss the impact of virus damage related to Varroosis.
- 6.11 Discuss the impact of re-infestation of Varroa on the management and timing of Varroa control.
- 6.12 Describe the impact of Nosema disease on a honey bee colony, and its diagnosis and treatment.
- 6.13 Describe Acarine, its detection and possible effects on a colony.
- 6.14 Describe Chalk Brood and Sac Brood, detection and possible effects on a colony.
- 6.15 Describe Chilled Brood and Bald Brood and possible effects on a colony.
- 6.16 Demonstrate familiarity with current regulations and other statutory requirements as they affect diseases and pests concerned with beekeeping.
- 6.17 Describe the signs that suggest a case of poisoning. Describe the actions that should be taken. Describe how a sample of affected bees is collected, packaged and labelled and where this is sent.
- 6.18 Be aware of potential new threats to beekeeping in the United Kingdom.

7.0 STINGS

The Candidate will be able to describe:

- 7.1 How to deal with a person who has been stung by a bee but shows no effect other than discomfort and slight local swelling.
- 7.2 Precisely the action to take when a person who has been stung by a bee, exhibits a severe reaction or anaphylactic shock.

8.0 HONEY AND HONEY PROCESSING

The Candidate will be able to:

- 8.1 Demonstrate the apiary equipment normally used specifically honey production.
- 8.2 Demonstrate devices for clearing bees from supers and discuss their use.
- 8.3 Demonstrate the equipment used to extract and prepare the honey produced in the apiary and show the place used for processing and packing honey.
- 8.4 Have typical samples of packed honey ready for the show bench and for retail sale available for inspection by the assessors. This should include a minimum of three jars of liquid and three jars of set honey.
- 8.5 Describe the preparation of liquid honey and set honey (both granulated and soft set) and methods that may be employed to obtain these with good quality results, including mention of the recommended temperatures for satisfactory results.
- 8.6 Describe the preparation of Comb Honey and methods employed to achieve this.
- 8.7 Describe the arrangements for extracting honey from the comb.
- 8.8 Describe the processing and storage arrangements for the honey and packaging for sale.
- 8.9 Describe how the requirements for public health and safety, consumer protection, food hygiene, as overseen by the Environmental Health Officer, apply to candidates.
- 8.10 Demonstrate familiarity with current regulations and other statutory requirements as they affect those offering honey for sale.
- 8.11 Describe the spoilage of honey particularly by fermentation (including the effect of water content, storage temperature and the presence of yeast)

9.0 RECORDS

- 9.1 The records may be kept in any convenient form by the candidate and will be used to record the activities and conditions found on every inspection of a specific hive. It will also provide information on the performance of the apiary including the quantity of honey taken and processed from the hives.
- 9.2 The records will provide a continuous record for at least twelve months.
- 9.3 There will be an entry in the records each time the beekeeper visits the apiary and manipulates a colony.

- 9.4 The candidate will enter the date and time of the visit and for each colony and will use a method of assessing the following attributes of the colony:
 - 9.4.1 The existence of a queen from no evidence to laying queen observed or witnessed.
 - 9.4.2 The existence or otherwise of queen cells/cups.
 - 9.4.3 The temper of the colony ranging from very docile to unworkable.
 - 9.4.4 The degree of disease and probable diseases seen.
 - 9.5.5 The brood size and pattern.
 - 9.5.6 Quantity of stores available (including pollen).
 - 9.5.7 Available space for colony expansion.
- 9.5 The records will be used to record the activities of the candidate, such as
 - 9.5.1 Feeding
 - 9.5.2 Frames/supers added or removed
 - 9.5.3 Queen rearing activities
 - 9.5.4 Swarm control activities
 - 9.5.5 Disease control activities including the use of all medicines
 - 9.5.6 Details of swarms collected
- 9.6 The records should also include the following items:
 - 9.6.1 The apiary layout

This can be pictorial and shows the location of each colony in the apiary and how they are marked. It is always recommended that hives are marked in some way so that other beekeepers and the public can identify the owners.

9.6.2 Plans for work in the apiary

This section will hold plans for managing the colonies in the apiary. It is particularly useful to record the activities and timings planned for queen rearing and swarm control. It can also be used as a reminder for repairing hives or buying new equipment.

If there is any concern over the general vigor or health of a colony it can be marked here as a reminder to replace certain queens or re-site colonies.

Information will also include the dates when inspections and manipulations are needed to raise new queens and other activities.

Version January 2025

Replaces version January 2024 (reviewed with no syllabus changes – only syllabus numbering changes – Section 1 – General Information incorporated into Application & Assessment Procedure and item 9.5 moved into section 3.5.2 of the Application & Assessment Procedure)

The British Beekeepers' Association National Beekeeping Centre Stoneleigh Park Kenilworth CV8 2LG

sec.exams@bbka.org.uk

Charity No: 1185343

https://britishbeekeepers.sharepoint.com/sites/BBKA/DATA/Exam Board/Syllabi 2025/General Husbandry Syllabus and information pack.docx