

BEEEDUCATED
BEEKEEPING STANDARDS

PRACTICAL BEEKEEPER STANDARD 2027

Understanding the competencies and KSBs

A candidate guide to the Practical Beekeeper Standard

What the Standard means in real beekeeping practice, with guidance on evidence and worked examples that connect genuine activity to the KSBs.

Real evidence. Real beekeeping. Competence demonstrated over time.

How to use this guide

This is the third public document in the BeeEducated Practical Beekeeper Standard suite. It sits alongside the Candidate Prospectus and How this is assessed. Its purpose is to explain the competencies and the Knowledge, Skills and Behaviours (KSBs) in practical language for prospective and registered candidates.

The most important principle

Evidence should come from genuine inspections and planned beekeeping activity. Nothing should be simulated, exaggerated or carried out simply to manufacture evidence.

K, S and B - what do they mean?

Type	What this means
K Knowledge	What you understand and can explain.
S Skills	What you can demonstrate in real practice.
B Behaviours	How you make decisions and conduct yourself as a responsible beekeeper.

One activity can evidence several KSBs

You are not expected to create a separate task for every KSB. A genuine activity can support several competencies where the evidence actually demonstrates them. The assessor will judge the evidence that is submitted, not the name of the activity. Completing an activity does not automatically achieve every KSB that might be associated with it.

The authoritative Standard remains the source of the formal requirements. This guide explains how those requirements can look in real beekeeping.

Behaviours that run through the whole Standard

The behaviours are not isolated tasks. They should be visible across the candidate's evidence and decision-making throughout the programme.

Behaviour	What this means in practice
B1 Colony welfare	Prioritises colony health, welfare and sustainable management over convenience, unnecessary manipulation or honey yield.
B2 Evidence-led judgement	Uses observations, records, colony history, monitoring and reliable information to make proportionate decisions.
B3 Reactive management	Responds to changing colony circumstances rather than managing only by calendar or habit.
B4 Biosecurity	Considers transmission routinely and applies appropriate controls.
B5 Reflection	Reviews outcomes, including unsuccessful ones, and improves future management.
B6 Professional limits	Seeks mentor, specialist, laboratory or statutory support where needed.
B7 Integrity	Keeps accurate records and submits honest evidence, including when outcomes are unsuccessful.
B8 Safe and responsible practice	Considers bees, people, livestock, neighbours, environment, food safety and wider responsibilities.

C1 | PRACTICAL BEEKEEPER STANDARD

Colony inspection, records and management decisions



Perform proportionate colony inspections, maintain accurate records, assess colony condition and health, analyse findings and colony history, and determine appropriate follow-up management, manipulation, monitoring or non-intervention.

WHAT THIS MEANS IN PRACTICE

This competency is the backbone of the Standard. It is about inspecting with a purpose, handling colonies competently, noticing what matters, using colony history and records, and deciding whether to act, monitor or deliberately leave the colony alone.

EVIDENCE MAY COME FROM

Inspection records; photographs or video; spoken explanation; follow-up entries showing what happened next; examples of deliberate non-intervention.

Code	Knowledge	Code	Skills
K1.1	Colony organisation, castes and seasonal colony state.	S1.1	Plan and conduct a purposeful colony inspection.
K1.2	Brood development, lifecycle and interpretation.	S1.2	Confident, controlled and bee-safe colony handling, including controlled shaking where required for brood-health assessment.
K1.3	Interpreting queen status and colony viability.	S1.3	Systematically assess adult bees, brood, queen status, stores, space and other relevant colony indicators across a range of colony sizes and production states.
K1.4	Purpose, timing and proportionality of inspection.	S1.4	Identify significant normal and abnormal findings and distinguish observation from assumption, including practical evidence of an NBU-recognised brood condition.
K1.5	Indicators of colony condition and management need.	S1.5	Produce accurate, contemporaneous inspection records sufficient to support future management decisions.
K1.6	Environmental and local influences on colony behaviour and management.	S1.6	Compare current findings with previous records to identify trends or changes.
K1.7	Using colony history and trends.	S1.7	Determine and justify appropriate next steps, including intervention, further monitoring or non-intervention.
K1.8	Accurate and useful hive records.	S1.8	Review management outcomes and adapt future management.

EVIDENCE EXPECTATION Longitudinal inspection evidence across different colony sizes, production states and points in the season. Practical evidence, images, dated hive records and spoken explanation should show observation → interpretation → decision → action → record → review.

C2 | PRACTICAL BEEKEEPER STANDARD

Biosecurity



Apply effective and proportionate biosecurity practices at hive and apiary level throughout routine and higher-risk beekeeping activities to minimise avoidable transmission of pests and disease.

WHAT THIS MEANS IN PRACTICE

Biosecurity should be visible in everyday practice, not saved for a disease outbreak. The beekeeper should understand how infection and pests can move and routinely work in ways that reduce avoidable transmission.

EVIDENCE MAY COME FROM

Between-colony hygiene; cleaning and sterilising equipment; footwear/protective-clothing arrangements; isolation decisions; changed practice when risk increases.

Code	Knowledge	Code	Skills
K2.1	Understand major routes by which pests and diseases may spread between bees, colonies and apiaries.	S2.1	Apply routine biosecurity consistently between colonies and after apiary work, including disinfectable gloves, tools, equipment/contact points such as smoker bellows, footwear and appropriate laundering of protective clothing.
K2.2	Understand equipment-related transmission risks, including tools, gloves, clothing, feeders, frames, comb and other equipment.	S2.2	Clean and sterilise hives and reusable hive components using methods appropriate to material and disease risk.
K2.3	Understand cleaning, disinfection, sterilisation, isolation, quarantine and controlled movement, including their limitations.	S2.3	Assess and manage the risk of moving pests, parasites and diseases when bees, brood, comb, stores or equipment are moved between colonies or apiaries.
K2.4	Understand how drifting, robbing, feeding practices and movement of bees, brood, comb or stores can affect biosecurity risk.	S2.4	Risk assess the apiary before opening colonies and plan the working order accordingly, adapting the plan as new observations arise.
K2.5	Recognise when routine biosecurity must be strengthened, including local disease alerts and suspected or confirmed statutory concerns.	S2.5	Isolate and quarantine bees, colonies and suspect material where health status is unknown, uncertain or potentially infectious, including caught swarms where appropriate.
K2.6	Understand when equipment or comb should not be moved, reused or shared, including uncertain health status and planned removal of excessively old/dark brood comb.	S2.6	Adapt biosecurity procedures appropriately when disease, contamination or other health risks are suspected or identified.
K2.7	Understand why biosecurity decisions must be proportionate and based on actual risk rather than ritual alone.		

EVIDENCE EXPECTATION Routine biosecurity must be evidenced repeatedly in genuine apiary activity, including at least one higher-risk decision. Knowledge may be shown through short activity-based write-ups, photographs or video linked to work the candidate has actually carried out.

C3 | PRACTICAL BEEKEEPER STANDARD

Seasonal colony management and overwintering



Manage colonies throughout their seasonal cycle, adapting space, resources, interventions and management objectives to colony condition and environmental circumstances.

WHAT THIS MEANS IN PRACTICE

Competent seasonal management means responding to the colony and local conditions rather than following a fixed calendar. Evidence can come from different colonies and different points in the season; it does not have to follow one colony from autumn to spring.

EVIDENCE MAY COME FROM

Spring expansion; space changes; dearth management; autumn preparation; winter-readiness decisions; post-winter review; adaptation to unusual weather or forage.

Code	Knowledge	Code	Skills
K3.1	Seasonal changes in colony population, brood production, drone production, food demand and storage.	S3.1	Assess whether colony development is appropriate for the season and local conditions.
K3.2	Spring build-up, expansion, nectar flows, dearth, autumn contraction and winter clustering.	S3.2	Provide or remove brood/storage space at an appropriate time and justify the manipulation.
K3.3	How local weather, forage and atypical seasons alter expected colony development.	S3.3	Prepare colonies for periods of high growth, forage shortage, autumn and winter.
K3.4	Principles of providing and removing brood and storage space without creating avoidable congestion or excessive unused space.	S3.4	Assess winter readiness and address identified deficits within an appropriate timeframe.
K3.5	Factors affecting winter readiness, including colony strength, queen status, stores, disease burden, Varroa and equipment condition.	S3.5	Assess colonies after winter and formulate an evidence-based spring management plan.
K3.6	Risks associated with poor timing of seasonal manipulations.	S3.6	Adapt planned management when colony development or weather differs from expectation.
K3.7	Why calendar-based management must be adapted to observed colony condition.		

EVIDENCE EXPECTATION Evidence should span spring, active season, autumn preparation, winter and post-winter review, showing continuity of judgement rather than calendar-led routine.

C4 | PRACTICAL BEEKEEPER STANDARD

Nutrition, feeding and stores management



Assess colony nutritional status and stores and make appropriate decisions concerning feeding and forage-related management while avoiding unnecessary or harmful intervention.

WHAT THIS MEANS IN PRACTICE

The beekeeper assesses stores and nutritional need and feeds only when there is a reason to do so. The Standard does not reward unnecessary feeding or require every feed type to be used.

EVIDENCE MAY COME FROM

Store assessments; feeding decisions when needed; feed choice and method; monitoring response; a reasoned decision not to feed.

Code	Knowledge	Code	Skills
K4.1	Colony requirements for carbohydrate, pollen/protein, water and micronutrients across seasons and brood states.	S4.1	Assess colony stores using appropriate observations and records.
K4.2	Indicators of adequate, declining and critically low stores.	S4.2	Identify nutritional risk before it becomes an emergency where reasonably possible.
K4.3	How forage availability, weather, colony size and brood rearing affect consumption.	S4.3	Select and provide an appropriate feed where required.
K4.4	Common feed types, their appropriate uses and limitations.	S4.4	Feed in a way that minimises robbing, drowning, contamination and avoidable disturbance.
K4.5	Risks associated with feeding, including robbing, spoilage/fermentation, contamination and inappropriate timing.	S4.5	Monitor the colony response and stop or alter feeding where circumstances change.
K4.6	Interactions between feeding, honey for human consumption, treatments and food hygiene.	S4.6	Recognise when feeding is unnecessary, inappropriate or likely to mask another problem.
K4.7	Why poor colony development may have causes other than lack of feed.		

EVIDENCE EXPECTATION At least two different nutritional/store-management situations should be evidenced, including one reasoned decision rather than a routine scheduled feed.

C5 | PRACTICAL BEEKEEPER STANDARD

Swarm prevention and control



Recognise swarm preparation and apply appropriate swarm prevention and control techniques according to colony condition, season and management objectives.

WHAT THIS MEANS IN PRACTICE

This is about recognising genuine swarm risk and choosing a proportionate prevention or control method that suits the colony and the beekeeper's objectives. Candidates are not expected to demonstrate every swarm-control method.

EVIDENCE MAY COME FROM

Inspection evidence of swarm risk; chosen prevention/control method; management of resulting units; review of whether the manipulation achieved its purpose.

Code	Knowledge	Code	Skills
K5.1	Biological drivers and colony conditions associated with reproductive swarming.	S5.1	Assess swarm risk using colony evidence rather than relying on one sign.
K5.2	Differences between play cups and queen cells of different functional significance, and limitations of inferring intent from cells alone.	S5.2	Recognise circumstances requiring preventive management before queen cells are developed.
K5.3	Relationship between colony demography, congestion, queen status, genetics, forage and seasonal timing in swarm risk.	S5.3	Select and perform an appropriate swarm-control manipulation.
K5.4	Difference between swarm prevention and swarm control.	S5.4	Manage resulting colony units, queen cells and space appropriately after the manipulation.
K5.5	Principles, advantages, limitations and risks of several accepted swarm-control methods.	S5.6	Review the outcome of swarm-management decisions and respond to unexpected queen or colony status.
K5.6	Consequences of inappropriate destruction of queen cells or poorly timed manipulations.		
K5.7	How swarm-control methods can be aligned with honey production, queen replacement or controlled increase.		

EVIDENCE EXPECTATION Genuine seasonal swarm-risk evidence is expected. The beekeeper should demonstrate the prevention or control methods they actually use when appropriate; there is no requirement to perform every possible method. Where swarm management genuinely creates a new colony or nuc, the same evidence may also cross-map to C10.

C6 | PRACTICAL BEEKEEPER STANDARD

Queen status, queen failure and colony recovery



Assess queen status and reproductive performance and respond appropriately to queenlessness, poor performance, unsuccessful mating, drone laying, laying workers and other queen-related colony problems.

WHAT THIS MEANS IN PRACTICE

Queen status is often inferred rather than confirmed by seeing the queen. The beekeeper should use brood, eggs, behaviour, queen cells, timing and colony history to judge viability and choose an appropriate recovery plan.

EVIDENCE MAY COME FROM

A case where queen status was inferred without seeing her; queen loss or failure; post-swarm/virgin timeline; requeening, waiting, uniting or another justified recovery approach.

Code	Knowledge	Code	Skills
K6.1	Queen biology, mating, sperm storage, egg laying and normal seasonal variation in laying.	S6.1	Assess likely queen status using eggs, brood, behaviour, queen cells, timing and colony history.
K6.2	Evidence of queenright and queenless states when the queen is not directly observed.	S6.2	Recognise evidence consistent with failing or abnormal reproductive performance.
K6.3	Normal and abnormal brood patterns and plausible causes.	S6.3	Construct a realistic timeline after queen loss, swarming, cell capping or emergence.
K6.4	Supersedure, emergency queen rearing and post-swarm queen replacement timescales.	S6.4	Select an appropriate recovery strategy based on colony viability, season and available resources.
K6.5	Drone-laying queens, laying workers and causes of apparent brood failure.	S6.5	Requeen, unite or add brood/resources appropriately where justified.
K6.6	Risks and benefits of requeening, uniting, adding brood, waiting, reducing space or allowing natural replacement.	S6.6	Monitor the colony after intervention and confirm or revise the diagnosis/management plan.
K6.7	Why premature intervention after queen loss or emergence may create further problems.		

EVIDENCE EXPECTATION Real queen-status assessments are expected, including at least one case where status is inferred from evidence rather than simply seeing a marked queen.

C7 | PRACTICAL BEEKEEPER STANDARD

Selective breeding, queen rearing and queen introduction



Assess colonies for useful and undesirable characteristics, identify suitable breeding candidates, perform appropriate queen-rearing techniques, produce spare mated queens and introduce queens successfully.

WHAT THIS MEANS IN PRACTICE

Queen rearing does not have to mean grafting or specialist cup systems. A candidate may evidence a naturally raised or split-raised queen, provided they can show the process resulted in a viable, mated queen and competent management. Queen introduction may also provide strong evidence.

EVIDENCE MAY COME FROM

A split or nuc that raises a queen; natural/emergency queen rearing managed to successful mating; queen introduction and acceptance; breeding-selection records.

Code	Knowledge	Code	Skills
K7.1	Difference between phenotype, environmental influence and heritable characteristics.	S7.1	Maintain records that allow colonies to be compared for selection purposes.
K7.2	Useful selection traits such as health, temperament, productivity, overwintering, swarming tendency and colony viability.	S7.2	Identify and justify suitable and unsuitable breeding candidates.
K7.3	Limitations of drawing breeding conclusions from small numbers or short observation periods.	S7.3	Carry out at least one appropriate practical queen-rearing method.
K7.4	Queen and drone development, mating biology and timing.	S7.4	Manage developing queen cells and mating units appropriately.
K7.5	Principles of cell production, queenless/queenright cell building and mating-unit management.	S7.5	Assess mating success and early laying performance.
K7.6	Common queen-rearing methods and their advantages and limitations at small scale.	S7.6	Maintain spare mated queens or replacement queens appropriately.
K7.7	Risks in queen introduction and factors affecting acceptance.	S7.7	Introduce a queen using an appropriate method and verify acceptance and subsequent performance.
K7.8	Importance of pedigree/performance records and honest recording of failures.		

EVIDENCE EXPECTATION Genuine queen-rearing activity is expected, including production/management of queen cells and at least one mating or queen-introduction outcome. Unsuccessful attempts may still provide valid evidence where competently analysed.

C8 | PRACTICAL BEEKEEPER STANDARD

Varroa and parasitic mite management



Monitor, interpret and manage parasitic mite infestation using appropriate monitoring methods, interventions, authorised treatments where applicable and integrated pest management principles.

WHAT THIS MEANS IN PRACTICE

Varroa must be actively managed, but the Standard does not prescribe routine treatment by calendar. Treatment-free management can be entirely valid where the beekeeper demonstrates monitoring, evidence-led decisions and appropriate response to mite pressure.

EVIDENCE MAY COME FROM

Monitoring results; treatment or treatment-free decision; product choice where used; timing and follow-up; evidence of how colony history or season informed the decision.

Code	Knowledge	Code	Skills
K8.1	Varroa biology, phoretic and reproductive stages and interaction with brood cycles.	S8.1	Use at least two appropriate Varroa monitoring approaches across the programme or explain why one method is unsuitable in a specific context.
K8.2	Effects of Varroa and associated viruses on individual bees and colony health.	S8.2	Record and interpret monitoring results, acknowledging uncertainty where relevant.
K8.3	Common monitoring methods, sampling error and limitations of each method.	S8.3	Develop an IPM plan appropriate to colony, season and management objectives.
K8.4	Seasonal mite dynamics and how brood presence affects monitoring and treatment effectiveness.	S8.4	Select and apply an authorised treatment correctly where treatment is required.
K8.5	Integrated pest management principles including biotechnical and chemical options.	S8.5	Use non-chemical/biotechnical measures appropriately where suitable.
K8.6	Authorised-treatment principles, label compliance, timing, residues, resistance and food-production considerations.	S8.6	Evaluate post-intervention results and alter the plan if control is inadequate.
K8.7	Why fixed thresholds or treatment calendars must be interpreted in context and current guidance checked.	S8.7	Maintain treatment and monitoring records sufficient for responsible management and food-safety traceability.
K8.8	Importance of evaluating treatment effectiveness rather than assuming success.		

EVIDENCE EXPECTATION Actual mite monitoring data over time plus at least one evidenced management decision/intervention and subsequent review.

C9 | PRACTICAL BEEKEEPER STANDARD

Adult bee and brood health



Assess adult bees and brood for signs of disease, disorder or abnormal development; interpret potential causes; investigate appropriately; take measures to control and prevent spread; and obtain specialist, laboratory or statutory assistance where required.

WHAT THIS MEANS IN PRACTICE

Routine brood and adult-bee health assessment should be part of normal inspections. Where a disease genuinely occurs, use it as evidence. Rare or notifiable conditions are not manufactured for assessment; recognition and required action can be explored through professional discussion using authoritative case material.

EVIDENCE MAY COME FROM

Normal brood-health checks; photographs/video of genuine abnormal findings; records of action and review; professional discussion for rare/notifiable conditions not encountered.

Code	Knowledge	Code	Skills
K9.1	Normal appearance and development of healthy eggs, larvae, pupae and adult bees.	S9.1	Systematically assess brood and adult bees for normal and abnormal signs.
K9.2	Signs associated with important brood diseases and disorders.	S9.2	Document abnormal findings accurately using records and images where appropriate.
K9.3	Signs associated with important adult-bee diseases, nutritional problems, poisoning, viruses and other disorders.	S9.3	Develop a reasoned differential assessment rather than jump to unsupported diagnosis.
K9.4	How Varroa, queen failure, starvation/chilling and other non-infectious factors may mimic or contribute to disease signs.	S9.4	Take immediate biosecurity/containment measures appropriate to the suspected risk.
K9.5	Principles of differential diagnosis and why visual signs alone may be insufficient for definitive diagnosis.	S9.5	Obtain or facilitate appropriate samples, confirmation or expert inspection where required.
K9.6	Routes of disease spread and immediate containment actions.	S9.6	Apply appropriate control/treatment within the beekeeper role and current rules.
K9.7	When laboratory confirmation, specialist advice or statutory notification is required.	S9.7	Review colony response and modify management as further evidence becomes available.
K9.8	Appropriate beekeeper-level control, treatment, destruction or equipment-management principles within legal and competence limits.		

EVIDENCE EXPECTATION Routine health assessment should be embedded throughout the portfolio, with real abnormal findings used where encountered. Rare or notifiable conditions may be assessed through high-quality scenarios and professional discussion.

C10 | PRACTICAL BEEKEEPER STANDARD

Establishing, increasing, uniting and moving colonies



Establish viable colonies and nucs, make controlled increase, unite colonies appropriately and move colonies or bees while managing biological, practical and biosecurity risks.

WHAT THIS MEANS IN PRACTICE

The emphasis is on sound decisions about whether and how to create, unite or move colonies. There is no requirement to demonstrate every method. Evidence comes from genuine seasonal work and should show colony viability, biosecurity and follow-up.

EVIDENCE MAY COME FROM

Making a viable nuc/split; uniting colonies when genuinely needed; preparing and moving a colony; post-action checks; biosecurity reasoning.

Code	Knowledge	Code	Skills
K10.1	Requirements for viable nucs/colonies including adequate adult bees, brood, stores, queen status and seasonal timing.	S10.1	Assess whether a source colony is suitable for increase.
K10.2	Risks of making increase from colonies that are weak, unhealthy, poorly provisioned or unsuitable.	S10.2	Create and establish a viable nuc or split using a justified method.
K10.3	Principles of balancing brood, adult bee population, stores and space when making up nucs/splits.	S10.3	Monitor development and correct imbalance where reasonably possible.
K10.4	Methods and risks of uniting colonies, including queen considerations and disease/biosecurity assessment.	S10.4	Assess whether colonies should be united and perform an appropriate unite.
K10.5	Effects of moving colonies on orientation, drifting and foraging.	S10.5	Prepare and secure a colony/nuc for movement.
K10.6	Transport considerations including closure, ventilation, secure loading, temperature and public safety.	S10.6	Move colonies safely and re-establish them appropriately at destination.
K10.7	Post-movement or post-unite checks and recovery management.	S10.7	Apply biosecurity principles to all increase, uniting and movement decisions.

EVIDENCE EXPECTATION Practical increase is mandatory. Unite and movement should be evidenced where available, with scenario-supported evidence only where a natural opportunity does not arise.

C11 | PRACTICAL BEEKEEPER STANDARD

Honey production, harvesting and selling



Manage colonies for responsible honey production, assess when honey is suitable for harvest and carry out hygienic harvesting, extraction, settling or processing, storage, jarring and compliant labelling and selling.

WHAT THIS MEANS IN PRACTICE

Candidates should show real honey handling where a crop is available: deciding when honey is ready, hygienic removal and processing, storage, jarring, traceability and compliant presentation. The evidence should reflect what the beekeeper genuinely does.

EVIDENCE MAY COME FROM

Honey removal; extraction or processing video; moisture/condition checks where relevant; cleaning/hygiene; jars/labels; batch and traceability records.

Code	Knowledge	Code	Skills
K11.1	Nectar collection, ripening, capping, moisture and factors affecting fermentation risk.	S11.1	Assess whether a crop is sufficiently mature and suitable for removal.
K11.2	Super management and the relationship between colony needs, nectar flow and harvest decisions.	S11.2	Remove and transport supers/honey hygienically while minimising contamination and robbing.
K11.3	Food-hygiene risks during removal, transport, extraction, settling, storage and jarring.	S11.3	Extract honey using clean equipment and appropriate food-hygiene controls.
K11.4	Use and limitations of refractometers or other approaches to assessing honey moisture where relevant.	S11.4	Settle, filter/process where appropriate and store honey without unnecessary deterioration.
K11.5	Crystallisation, granulation, temperature effects and appropriate processing/storage.	S11.5	Assess moisture/condition where appropriate and make a reasoned decision about suitability for jarring/sale.
K11.6	Traceability, batch/lot control and record keeping appropriate to small-scale honey production.	S11.6	Jar honey hygienically and apply compliant labels for the applicable UK jurisdiction/market.
K11.7	Current legal requirements for selling/supplying honey, including composition, descriptions, weights/measures, origin and mandatory label information as applicable.	S11.7	Maintain basic production and traceability records.
K11.8	Circumstances in which honey should not be harvested, sold or represented in a particular way.	S11.8	Identify misleading or non-compliant claims/labels and correct them.

EVIDENCE EXPECTATION Genuine extraction/processing evidence is expected where the learner has access to a crop. A compliant label and traceability record are mandatory; a simulated label may be accepted where the learner does not sell commercially.

C12 | PRACTICAL BEEKEEPER STANDARD

Hive, comb and equipment management



Select, use, inspect, maintain, clean, store and replace hive equipment and comb appropriately, including planned comb replacement and manipulation in response to colony health, disease risk, brood-nest condition and management objectives.

WHAT THIS MEANS IN PRACTICE

Equipment and comb management is assessed through real inspections, maintenance and planned work. This includes deciding what can be reused, cleaned, repaired, stored, moved, replaced or destroyed and why.

EVIDENCE MAY COME FROM

Assessment of boxes, floors, frames and comb; staged comb replacement; Bailey-type change or shook swarm where genuinely appropriate; repairs, scorching/cleaning, storage and disposal.

Code	Knowledge	Code	Skills
K12.1	Functions of common hive components and implications of incompatible or poorly maintained equipment.	S12.1	Inspect hive equipment and comb and identify deterioration, damage, contamination or health-related concerns.
K12.2	How comb ages, becomes damaged or contaminated and why brood-comb renewal may be beneficial.	S12.2	Plan and carry out appropriate comb renewal/change based on colony and health needs.
K12.3	Health and biosecurity implications of moving drawn comb between colonies.	S12.3	Manipulate comb appropriately to support colony management without creating avoidable brood or temperature risks.
K12.4	Principles, indications and limitations of planned comb-change methods including staged replacement, Bailey-type change and shook-swarm approaches where appropriate.	S12.4	Decide whether drawn comb/equipment can be safely transferred and justify the biosecurity decision.
K12.5	How comb manipulation can support brood-nest condition, colony growth and management objectives, and when rearrangement may be harmful.	S12.5	Clean, maintain and store equipment appropriately.
K12.6	Storage risks including wax moth, rodents, moisture, mould and chemical contamination.	S12.6	Prevent or manage avoidable storage damage including wax-moth damage.
K12.7	Cleaning/disinfection limits for different materials and circumstances.	S12.7	Repair, replace or dispose of unsuitable equipment/comb appropriately.
K12.8	Criteria for repair, reuse, quarantine, replacement or disposal of equipment/comb.		

EVIDENCE EXPECTATION Practical evidence should include equipment assessment and at least one planned comb-management or renewal action linked to a health or colony-management rationale.

C13 | PRACTICAL BEEKEEPER STANDARD

Apiary management and safe working



Establish and operate within an apiary in a manner that supports effective colony management while protecting the beekeeper, other people, animals and the surrounding environment.

WHAT THIS MEANS IN PRACTICE

Safe working is part of competent beekeeping rather than a separate classroom exercise. Evidence may include site risk, manual handling, smoker and fire safety, emergency planning, lone working and safe use of heat during activities such as wax rendering.

EVIDENCE MAY COME FROM

Apiary/site review; PPE and tool use; safe lifting; smoker box/fire extinguisher arrangements; emergency location information such as what3words; wax-melting safety.

Code	Knowledge	Code	Skills
K13.1	Apiary siting factors including access, aspect, water, forage, drainage, prevailing conditions and security.	S13.1	Assess an apiary/site for practical, public, animal and environmental risks.
K13.2	Risks to neighbours, public, livestock and other site users.	S13.2	Plan and organise work to minimise avoidable disturbance and danger.
K13.3	Personal protective equipment, smoker/fire safety, tool safety and manual handling.	S13.3	Select and use appropriate PPE, smoker and tools safely.
K13.4	Sting risk, allergic reactions and emergency planning appropriate to the setting.	S13.4	Handle equipment using safe manual-handling principles and appropriate assistance/aids.
K13.5	Effects of colony density, drifting, robbing and entrance orientation.	S13.5	Manage robbing/drifting and nuisance risks where reasonably possible.
K13.6	Safe access, vehicle use, lifting aids and working-alone considerations.	S13.6	Respond appropriately to unsafe weather, defensive colony behaviour, sting incidents or other emergent risks.
K13.7	When weather, colony behaviour or environmental conditions make inspection unsafe or inappropriate.	S13.7	Leave colonies and the apiary secure after work.

EVIDENCE EXPECTATION Routine safe-working evidence is expected across the programme, plus at least one explicit apiary/site risk assessment or structured review.

C14 | PRACTICAL BEEKEEPER STANDARD

Exotic pests, invasive species and statutory responsibilities



Monitor for invasive species, exotic pests, parasites and statutory bee-health threats, recognise suspicious findings and comply with relevant reporting, inspection, monitoring and control arrangements.

WHAT THIS MEANS IN PRACTICE

Candidates must understand current exotic and invasive threats and know the correct reporting route. A real incursion is never required for assessment. Where the threat is not encountered, professional discussion and authoritative reference material can test recognition and response.

EVIDENCE MAY COME FROM

Current alert awareness; identification knowledge; reporting route; actions following a real alert or suspect finding; professional discussion where no encounter occurs.

Code	Knowledge	Code	Skills
K14.1	Purpose of national bee-health surveillance and statutory/regulatory inspection.	S14.1	Carry out appropriate routine surveillance during colony and apiary work.
K14.2	Current important exotic/invasive threats relevant to UK beekeeping and their broad recognition features.	S14.2	Recognise suspicious signs/specimens that warrant further investigation or reporting.
K14.3	Difference between routine beekeeper management and situations requiring statutory notification or official direction.	S14.3	Distinguish plausible target threats from common alternatives at an appropriate beekeeper level.
K14.4	Current reporting routes for suspected notifiable/reportable bee pests/diseases and invasive species.	S14.4	Document and report concerns through the correct current route.
K14.5	Principles of preserving useful evidence safely without increasing spread or personal risk.	S14.5	Apply immediate biosecurity/containment actions while awaiting official advice where appropriate.
K14.6	Potential pathways of introduction and why movement records/biosecurity matter.	S14.6	Cooperate effectively with statutory inspection and follow lawful official instructions.
K14.7	Beekeeper responsibilities during official inspection, sampling, movement restrictions or control action.	S14.7	Locate and use current official guidance/resources when requirements change.
K14.8	Need to verify current statutory lists/guidance rather than rely on outdated memory.		

EVIDENCE EXPECTATION Genuine routine surveillance plus mandatory scenario-based assessment for rare/exotic/notifiable threats. Natural occurrence of an exotic pest is not required.

C15 | PRACTICAL BEEKEEPER STANDARD

Reflective, responsible and evidence-led beekeeping practice



Evaluate management outcomes, learn from experience, identify limits of competence and continually adapt practice in response to evidence, colony circumstances and developing knowledge.

WHAT THIS MEANS IN PRACTICE

Reflection is about learning from real outcomes and adapting to the beekeeper's own climate, forage, colonies and season. It also includes recognising professional limits and keeping practice current without turning the programme into an hours-based CPD exercise.

EVIDENCE MAY COME FROM

A decision that did not work as expected; what was learned; how later management changed; evidence of checking current guidance when practice or risks change.

Code	Knowledge	Code	Skills
K15.1	Why beekeeping rules-of-thumb and calendar dates have limitations.	S15.1	Review outcomes against the original management objective.
K15.2	How records and comparison over time support better decisions.	S15.2	Identify what evidence supported a decision and what information was missing.
K15.3	Difference between observation, interpretation, correlation and cause.	S15.3	Acknowledge and analyse mistakes or unsuccessful outcomes without concealing them.
K15.4	How uncertainty should influence the confidence of a management decision.	S15.4	Modify subsequent management in response to learning and changing evidence.
K15.5	Sources of reliable, current information and how to evaluate conflicting advice.	S15.5	Seek appropriate advice or specialist help before exceeding personal competence.
K15.6	Role and limits of mentors, associations, inspectors, laboratories, veterinarians/other specialists where relevant.	S15.6	Evaluate information sources and explain why one source is more reliable/relevant than another.
K15.7	Importance of continuing professional development and updating practice as evidence/guidance changes.	S15.7	Create and maintain a personal development plan based on evidence from practice.
K15.8	Why honest analysis of unsuccessful outcomes is valuable evidence of competence.		

EVIDENCE EXPECTATION Reflection should be embedded throughout the portfolio, including at least one successful and one unsuccessful or unexpectedly complex management episode. A generic reflective essay alone is insufficient.

C16 | PRACTICAL BEEKEEPER STANDARD

Regulatory, traceability and best-practice record keeping



Maintain accurate, current and traceable records relating to government bee-health registration, apiaries, colony numbers, feeding, treatments, acquisition, movement and sale of bees, and statutory bee-health activity, in accordance with current legal requirements and recognised best practice.

WHAT THIS MEANS IN PRACTICE

Good beekeeping is traceable. Candidates should maintain the records that genuinely apply to their practice, including registration/apiary information, medicines, feeding, movement, acquisition, transfer and sale. Statutory processes are evidenced when they occur; otherwise the beekeeper must know what is required and where to check.

EVIDENCE MAY COME FROM

Current apiary/colony registration information; treatment/medicine records; feeding records; movement/acquisition/sales trail; records linked to a real statutory process if one occurs.

Code	Knowledge	Code	Skills
K16.1	Understand the beekeeper's regulatory and best-practice record-keeping responsibilities, including which records are legally required, why they are maintained and applicable retention requirements.	S16.1	Maintain current beekeeper, apiary-location and colony information with the relevant government or national bee-health authority.
K16.2	Understand the purpose of government or national bee-health registration and accurate apiary/colony information in supporting disease alerts, surveillance and professional inspection during outbreaks.	S16.2	Maintain compliant veterinary-medicine purchase, administration and disposal records.
K16.3	Understand statutory veterinary-medicine record requirements for bees, including acquisition, administration, disposal, traceability and retention.	S16.3	Maintain accurate, contemporaneous feeding and treatment records linked to the relevant colony.
K16.4	Understand the purpose and content of accurate feeding and treatment records and their relevance to colony management, food safety and traceability.	S16.4	Maintain acquisition, movement, transfer and sales records for bees and queens sufficient to support traceability.
K16.5	Understand the importance of traceability when bees or queens are acquired, caught, moved, transferred, given away or sold, including provenance and relevant health information.	S16.5	Retrieve and present an organised, auditable record trail showing relevant registration, feeding, treatment, movement/sale and other applicable records.
K16.6	Understand the statutory disease investigation and control process from suspicion/reporting through inspection, standstill/restrictions, sampling/laboratory confirmation, treatment or destruction notices, reinspection and release from restrictions.		
K16.7	Understand record integrity, contemporaneous recording, honest correction, secure retention, retrievability and confidentiality of sensitive information.		

EVIDENCE EXPECTATION Real records are central. Evidence should include current government bee-health registration, actual feeding/treatment records and genuine acquisition, movement, transfer or sale records where those activities occur. Statutory disease-process knowledge may be assessed through professional discussion/scenario where no real incident has occurred.

Worked examples

How real activities can support several KSBs

The following examples show how a genuine beekeeping activity may generate evidence across several competencies. They are a guide to possible evidence opportunities, rather than a prescribed list of assessment tasks.

The evidence determines what is achieved

Carrying out an activity does not automatically achieve its associated KSBs. The assessor considers what the candidate actually did, why they did it, what they recorded or explained, and whether the evidence is valid, authentic, reliable, current and sufficient for each KSB.

Examples in this section

1. A shook swarm or complete comb change
2. Creating a nuc and raising or introducing a queen
3. Honey harvest and processing

Use one activity for several KSBs only where the submitted evidence genuinely demonstrates them. Do not carry out unnecessary or contrived manipulations merely to create evidence.

WORKED EXAMPLE 1

A shook swarm / complete comb change

A shook swarm can be a rich piece of evidence when it is a genuine, justified management activity. It does not automatically achieve the KSBs below. The assessor looks at what the beekeeper actually observed, decided, did, recorded and reviewed.

Code	POTENTIAL EVIDENCE	WHAT WOULD NEED TO BE SHOWN
C1	Inspection and decision-making	Why was intervention needed? What colony evidence and history supported the decision?
C2	Biosecurity	How were tools, equipment and potentially contaminated comb handled? Was movement risk considered?
C3	Seasonal management	Was timing appropriate for colony strength, weather, forage and recovery?
C4	Nutrition	If feeding was needed to support comb building, was that decision justified and monitored?
C8	Varroa	If the manipulation formed part of an IPM plan, is that link evidenced rather than assumed?
C12	Comb and equipment management	This can provide strong evidence of planned comb renewal, equipment assessment and disposal/storage decisions.
C13	Safe working	Lifting, smoker use, fire precautions and safe organisation may be visible in video or witness evidence.
C15	Reflection	Did the beekeeper review recovery and explain what they would repeat or change?
C16	Records and traceability	Were the manipulation, feeding/treatment where applicable, and follow-up recorded accurately?

Important: these are evidence opportunities, not automatic credits. The submitted evidence must be valid, authentic, reliable, current and sufficient for the particular KSB being assessed.

WORKED EXAMPLE 2

Creating a nuc and raising or introducing a queen

A split or nuc can show how several parts of the Standard connect. Queen rearing does not require grafting: a candidate may evidence a queen raised naturally from suitable brood, provided the management and successful outcome are demonstrated.

Code	POTENTIAL EVIDENCE	WHAT WOULD NEED TO BE SHOWN
C1	Inspection and records	Source-colony condition, brood, stores and queen status are assessed and recorded.
C3	Seasonal management	The timing and resources available are appropriate for the season.
C5	Swarm prevention and control	If the split was genuinely used as swarm management, the evidence may support the relevant KSBs.
C6	Queen status and recovery	The candidate interprets eggs, brood, queen cells and mating timescales rather than relying only on seeing a queen.
C7	Queen rearing/introduction	Evidence can show emergence, mating, laying and successful acceptance, or a managed introduction.
C10	Establishing/increasing colonies	The nuc is viable, balanced and followed up until established.
C15	Reflection	The beekeeper reviews what happened and adapts later decisions.
C16	Traceability	Movement, transfer or sale records are maintained where applicable.

Important: these are evidence opportunities, not automatic credits. The submitted evidence must be valid, authentic, reliable, current and sufficient for the particular KSB being assessed.

WORKED EXAMPLE 3

Honey harvest and processing

A real honey crop can generate evidence well beyond the extraction itself. The strength of the evidence depends on the decisions, hygiene, traceability and explanation captured.

Code	POTENTIAL EVIDENCE	WHAT WOULD NEED TO BE SHOWN
C1	Inspection and decision-making	The candidate assesses colony condition and whether removing honey is appropriate.
C3	Seasonal management	Honey removal is considered alongside forage, colony needs and the point in the season.
C11	Honey production	Maturity, hygienic removal, extraction, storage, jarring, labelling and traceability can be directly evidenced.
C13	Safe working	Manual handling of supers and safe equipment use are part of the activity.
C15	Reflection	The candidate reviews yield, quality, timing and any problems in the process.
C16	Records	Batch/lot, treatment and traceability records are maintained where applicable.

Important: these are evidence opportunities, not automatic credits. The submitted evidence must be valid, authentic, reliable, current and sufficient for the particular KSB being assessed.

Building a strong portfolio without manufacturing evidence

1. Start with real work

Look ahead at inspections and planned activities that you genuinely need to carry out. Use the credential requirements to identify which KSBs those activities might naturally evidence.

2. Capture enough context

A photograph of a frame may show what was present, but it may not show why you made a decision. Combine records, images/video and explanation where needed.

3. Show the decision loop

Strong evidence often shows: Observe -> Interpret -> Decide -> Act -> Record -> Review. Not every piece needs all six stages, but competence is stronger when the assessor can follow the reasoning.

4. Cross-map honestly

Use the same evidence for several KSBs only where it genuinely demonstrates them. Do not attach unrelated KSBs simply because they occurred on the same day.

5. Let gaps emerge naturally

Some events may never arise. Do not create disease, emergency or unnecessary manipulation for assessment. Where appropriate, knowledge and decision-making can be explored through professional discussion using authoritative material.

6. Keep evidence honest

Unsuccessful outcomes can be valuable. A well-recorded decision that did not work, followed by thoughtful review and adaptation, can demonstrate more competence than an unexplained success.

The Standard is demonstrated in practice.

Not by completing artificial tasks. Not by collecting files for their own sake. By showing that you can understand a colony, make proportionate decisions, carry out beekeeping competently and learn from what happens next.

BeeEducated Beekeeping Standards
Practical Beekeeper Standard 2027
Candidate guide - Understanding the Competencies and KSBs