



Animal &
Plant Health
Agency

National Bee Unit

Best Practice Guideline No. 2

November 2025

Handling and examining a colony of bees

From spring onwards, colonies of honey bees will need to be inspected on a regular basis. This is done to ensure they have enough space and food, to check for signs of swarming and for pests and diseases. Regular inspections allow the beekeeper to pre-empt and manage any problems, allowing colonies to be as productive as possible.

Preparation

- Prepare a bucket of washing soda solution (1 kg of soda crystals dissolved in 4.5 litres of hot water) for routine cleaning of gloves and hive tools between colonies. This quantity can be stored in a suitable sealed container and used over a four week period.
- Take a sealable container with you for scrap wax.
- Be certain that circumstances are suitable to examine the colony. Do not start your examination if the weather is poor or if there are people or animals in the vicinity.
- The forage conditions will affect the disposition of the bees. Learn to judge when a nectar flow is on by watching how many bees are foraging and noting how much uncapped or freshly capped honey is present in the colony. When a nectar flow has just ended, the bees may be more defensive than usual.
- Before opening the colony, make an assessment from the outside. Check for dead or diseased bees outside the hive, check the removeable floor-tray (if used), observe the entrance and ensure it is wide/narrow enough for the conditions.
- Light the smoker away from the hive and before you put up your beekeeping veil to ensure that it doesn't catch any sparks from a sudden flare up during

lighting. Keep the smoker away from flammable material during the inspection and do not rest it on polystyrene hive roofs.

- Keep colony records. An example colony record can be found at the bottom of this guide. Records from previous visits are helpful to consult before each inspection so appropriate preparations can be made in advance.
- It is recommended to wear nitrile/latex gloves rather than leather gloves as leather gloves are difficult to clean and make it more difficult to gently handle the bees.



Figure 1: Have a lit smoker nearby throughout your inspection (left). Scrape brace comb and propolis from surfaces to reduce the chances of things becoming stuck together (right).

Opening the hive

- Remove the roof and placed it upturned near to where you are working. Place any supers on top of the upturned roof; they can be offset to sit on the roof at an angle to prevent crushing bees underneath the supers. While inspecting the brood boxes, keep the supers covered with the crown board to prevent robbing.
- Carefully remove the queen excluder and check to ensure that the queen is not on it. Place the queen excluder upturned on the supers if you have two brood boxes. Place the top brood box above the queen excluder on the supers while you inspect the bottom box (the queen excluder will prevent the queen from escaping from the underside of the brood box if she is in it).
- Gently scrape any brace comb or propolis as you go along and place it into a sealed container that you can take away with you. Do not discard it on site as it may cause robbing, which has the potential for disease transmission.
- Carefully remove the end frame/dummy board, to give space to easily remove or move the other frames without damaging the bees. After inspecting to see if the queen is on it, place it in a safe place at the front or side of the hive; preferably not in direct sunlight.

What to look for & what to do

- Be calm and methodical throughout your examination of the colony avoiding any sudden bumps or sharp actions.
- Use smoke sparingly to clear the bees from the area you are working in rather than “let them know you are coming”. Smoke from the top downwards rather than from the bottom as smoking from the bottom drives the bees upwards.
- Examine each comb thoroughly enough for the purposes of your examination. Reasons to be inspecting a hive include: ensuring the colony is

building up or checking if more space is needed, checking for signs of swarming, checking food stores, performing a disease check, checking the queen status and brood pattern, and monitoring for varroa or exotic pests.

- While performing your inspection, whatever its purpose, always keep an eye out for anything out of the ordinary and record it or take photos of it. Ask for advice if you are unsure about anything you've observed.
- The top and side bars can be kept clean by scraping off any wax or burr comb.
- Where possible, replace combs in the same sequence and the same orientation as they were at the start of the inspection.
- Any new, undrawn frames that need to be added should be put to the side of the brood nest and not in the middle of it. Only do this when conditions are right for them to be drawn (i.e. during a nectar flow).
- Unless you are moving frames to the outside of the brood box with a view to removing them from the hive at the next inspection, do not split the brood frames.



Figure 2: A gentle smoke across the top bars will clear bees away so that frames can be taken out with minimal risk of accidentally crushing any bees (left). Remove the end frame from the colony before inspecting to provide space to work (right).

- If you suspect disease is present in a colony, make certain that you do not cross contaminate with another colony. Clean your gloves and hive tools, changing your gloves if necessary.
- If you have reason to suspect European foulbrood or American foulbrood, you must reduce the entrance to minimise robbing by bees from other colonies and [notify your local bee inspector or the NBU](#) immediately. This is a legal obligation.
- Monitor levels of varroa mites throughout the year; there are various methods to do this which are covered in our fact sheet on [estimating varroa populations](#). Treat the colonies only when it's necessary to do so.
- Changing combs is important in keeping disease at bay. To learn more about how to replace old brood comb, please read our fact sheet on [replacing old brood comb](#).



Figure 3: Larvae should be white, C-shaped and plump (1). Any melted, twisted or yellowing larvae are a sign of European foulbrood (2-5) and should be reported to NBU immediately.

Closing up

- Re-assemble the hive making sure that frames are tightly pushed up together to provide correct bee space. Remember to return the end frame/dummy board to the colony and replace the queen excluder in the correct orientation.
- Ensure that the hive is stable on its stand or the ground and that it is properly assembled with no gaps between boxes.
- Check that the site is clean and tidy and make the notes on your record card before leaving the site.

Best practice recommendations

- Always have a reason for examining the colony.
- Practice good hygiene by washing tools and equipment regularly, using soda solution to remove organic matter and propolis.
- Perform inspections regularly during swarm season.
- Inspect for brood diseases at least two times a year.
- Keep records for each colony, it is helpful to keep notes on the bee and brood population and the general colony condition.
- Keeping a record of any veterinary medicines applied to the colony is a legal requirement. It may be useful to use this [downloadable template of the veterinary medicines record](#).
- Make sure the apiary is clean and tidy after each inspection, ensure that traces of wax and honey are in sealed containers to prevent robbing.

Further reading

- For more information on how to recognise the signs of foulbrood and other brood diseases, please read our [advisory leaflet on foulbrood disease of honey bees](#).
- For more about recognising the signs of adult bee diseases, please read our [advisory leaflet on adult pests, diseases and disorders](#).
- Read our advisory leaflet on [Managing Varroa](#), which provides full details of how to effectively monitor and treat for *Varroa*.
- For advice on routine hygiene in the apiary, please consult our [fact sheet on apiary hygiene and quarantine](#).

Are you registered on BeeBase?



BeeBase is a FREE online service provided by the National Bee Unit to help protect you and your fellow beekeepers from pests and diseases that threaten the health of honey bee colonies.

If there is a disease outbreak in your area, the NBU team uses BeeBase to contact local beekeepers to arrange precautionary inspections to check for any signs of infection and to advise on what to do.

Register today at: www.nationalbeeunit.com

This leaflet was produced as part of the Healthy Bees Plan. The Healthy Bees Plan aims to address the challenges facing beekeepers in sustaining the health of honey bees and beekeeping in England and Wales. It has been jointly developed by governments, beekeepers, their associations and other stakeholders.

For more information on the Healthy Bees Plan, please visit:

www.nationalbeeunit.com/bee-health-improvement/the-healthy-bees-plan-2030/

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