



Animal &  
Plant Health  
Agency

## National Bee Unit

### Best Practice Guideline No. 3

November 2025

# *Apiary and hive hygiene*

While many diseases can be introduced into colonies by the movement of bees, good apiary and hive hygiene can reduce the impact of disease and help minimise the risk of disease transmission between colonies and apiaries. Hygienic practices should incorporate regular cleaning of hives, equipment and clothing, with regular comb replacement.

#### Cleaning or disinfecting

- The presence of dirt and debris on equipment, clothing or other surfaces can promote the transfer, multiplication and transmission of pathogens that cause disease, so cleaning should be a routine activity in the apiary. **Cleaning** is different from **disinfecting**, which is used when disease is, or was, known or suspected to be present.
- For more detailed information on routine hygiene, please read our fact sheet on [‘Apiary hygiene and quarantine’](#).
- For more information on disinfecting equipment, please read our fact sheet [‘Disinfecting a hive after disease’](#).

#### Routine cleaning of equipment

- The standard method for routine cleaning of boxes and equipment involves scraping away wax and propolis which can harbour pathogens, followed by scrubbing with a soda solution comprised of 1 kg of soda crystals (also known as washing soda or sodium carbonate) in 4.5 litres of water.
- Always wear protective clothing, gloves and eye protection when handling soda crystals or soda solution and ensure that they do not come into contact with skin.  
**Please note that eye contact with washing soda can cause permanent corneal injury and chemical burns.**
- Clean hive tools and other equipment, such as queen excluders, by soaking in soda solution and scrubbing with a stainless-steel scourer.

- Clean boxes by scraping the surfaces with a hive tool. Remove stubborn deposits of propolis with a soda solution.
- Clean smokers by scraping off wax and propolis residues and soaking the metal components in soda solution. Pay particular attention to cleaning the bellows but do not allow any liquid to get inside the bellows.



Smokers may become encrusted with propolis and dirt, like the smoker on the right. It is recommended to scrub smokers with a soda solution to return them to their former shine (left). Image courtesy Ian Nichols, Crown copyright 2024.

### Clothing

- Ensure that clothing and equipment are clean and free from accumulation of wax or propolis before beginning a colony inspection.
- Bee suits should be washed regularly on a hot wash, in accordance with the manufacturer's recommendations. Half a cup of soda crystals added to the wash will help remove propolis, wax and honey staining. *Some makes of hood/veil cannot be washed in a machine, please check the manufacturer's instructions.*
- A fresh pair of disposable gloves is recommended for colony inspections. Washing up gloves may also suffice if they are thoroughly cleaned in between apiary visits. Leather gloves are not recommended because they are impossible to clean adequately but, if used, they can be worn underneath a fresh pair of disposable gloves.
- Boots should be cleaned regularly with soda solution.

### In the apiary

- Be cautious about purchasing second hand hives and equipment. Disease causing organisms can be transmitted from used equipment for many years. *Never use second hand combs.*
- Robbing is a route of disease transmission. Old comb or fragments of wax discarded in the apiary may be robbed out by bees. Avoid leaving combs and equipment lying around in the apiary. Keep a sealable container in the apiary so that brace comb and other scraps of wax can be placed inside it and kept covered.

- Honey and sugar syrup spills encourage robbing, be careful not to spill feed when topping up feeders and clean up spills immediately. Keep containers of feed closed when not in use.
- To prevent robbing of colonies, close off any dead colonies immediately and reduce entrance sizes on colonies during feeding, especially smaller colonies.
- Arrange colonies to minimise drifting; do not keep them in a straight line with entrances facing in the same direction. Orientate them at different angles and consider using different coloured boxes to help the bees locate their colony accurately.
- Avoid feeding honey or pollen from other colonies back to bees. Sugar syrup or pollen substitutes are safer alternatives.

### In the hive

- Brood comb should be replaced with fresh foundation at least every three years. For more information on how to perform a comb change, please view our fact sheet [‘Replacing old brood comb’](#).
- Avoid swapping frames around within or between hives; replace them in their original sequence and orientation.
- Avoid crushing or squashing bees during inspections. Consider using dummy boards to help manipulate frames without crushing bees. Use smoke to encourage bees back into the box away from contact points before reassembling boxes and closing up hives.
- Do not use ‘inspection cover cloths’ because these can harbour disease that could be spread between colonies.

### Best practice recommendations

- Wash tools and equipment regularly using soda solution and a scourer to remove organic matter and propolis.
- Launder bee suits and wash boots regularly. Use disposable gloves for inspections.
- Perform brood comb replacement at least every 3 years.
- Avoid transferring frames between colonies where possible.
- Do not feed honey or pollen from other colonies back to bees. Never feed bought honey to your bees.
- To prevent robbing, do not leave old comb or wax in the apiary uncovered and clean up honey/sugar spills immediately.
- Set up colonies to avoid drifting.
- Keep swarms isolated from other colonies until they are confirmed disease free for at least two brood cycles, a minimum of 6 weeks.
- Ensure all new colonies of bees are inspected for disease before being introduced into the apiary.

### 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](#).

## 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](http://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/](http://www.nationalbeeunit.com/bee-health-improvement/the-healthy-bees-plan-2030/)

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