

Extracting Honey

The basic steps

- Check the honey is ready to extract
- Clear the bees from the super
- Remove the super from the hive
- Prepare the extraction space
- Uncap the comb
- Spin the combs to extract the honey
- Strain the honey into a bucket
- Decant into jars

Tools required

- Porter bee escape or rhombus
- Spare crown board or cover , and base-tray (for transportation)
- Newspaper to cover the floor, plus plenty of spare
- Uncapping tool and food-grade cappings collector
 - Long bladed knife
 - Uncapping fork
 - Heated uncapping knife
 - Heat gun
 - (heated) uncapping tray, or bowl and wooden stick

Tools required cont.

- An extractor
 - Tangential
 - Radial
 - 2, 3, 4, 5 or 9 frames
 - Manual or electric
- Spatula
- Filter system
 - Stainless steel double filter
 - Plastic or metal sieve and stockings, sterilised
- Bucket with honey-gate tap
- Jars, lids and labels

Check the honey is ready to extract

- The majority of honey on the comb should be capped
- Lift out the frame , hold it horizontally over the hive and give it a shake
- If it drips, it is not ready
- If it does not drip - even if it is not all capped - it is OK to extract
- It maybe that not all the frames in a super will be ready

Clear the super of bees

- The most basic approach is to shake and brush the bees off the frames.
 - Might be feasible when only one or two frames are being extracted
 - Not so suitable for a full super!
- Rearrange the supers to get the one/s you want to extract on the top. Use a rhombus or porter bee escape to create a one way passage out of the box
- Leave for 24 hours

Remove the super from the hive

- Lift the cleared super away from the hive
- Brush away any remaining bees
- If not taking all the frames – transfer those to be extracted to another box. Fill the gaps with fresh frames – drawn if possible, and if appropriate return the super to the hive.
- If transporting the box, cover with a crown board to keep raiding bees out, and stand it on something to protect the surface you put it down on.
- Never assume there are no more bees – wear a bee suit!

Prepare the extraction space

- This is a messy job! Honey flows silently, and honey-gate taps usually leak
- Cover the floor with newspaper- deep litter!
- Place the extractor as close as possible to the uncapping bench
- Have a damp cloth to hand, cold water and a towel
- Ensure windows and doors are closed – bees smell honey from far away.....

Uncap the comb

- Ideally stand the comb up on an uncapping tray
 - Any food-grade plastic or metal tray, or a bowl with a wooden stick across it, will do; or use a heated uncapping tray
- Traditionally a knife is used to slice away the cappings
 - Long bladed knife
 - Heated uncapping knife
 - Uncapping fork to open all the cells
- A heat gun is a great alternative – use with care and don't overheat the honey
- Collect the cappings in a bowl , bucket or tray

Place frames in the extractor and spin

- Check the honey-gate is closed tightly
- As soon as the cappings are off, place the frame into the extractor so any drips of honey are not lost
- If the extractor is not full, ensure the frames are spaced so the device is balanced
- Once filled place the lid on the extractor and spin,
 - By hand – a good workout!
 - Electric
- Radial extractor: top of bars at the outside; check the frames from time to time and stop when most of the honey has been extracted
- Tangential extractor: bottom bars in direction of travel; start slowly to avoid damaging the comb – centrifugal force is powerful!- reverse frames; spin and reverse again

Remove the frames

- The spun frames can be removed and returned to the super, standing it on something to protect the work surface
- This is called a 'wet super'; it can be placed back on the hive for the bees to refill, - putting drawn comb on the hive will allow the bees to store honey more quickly - or stored safely
- Alternatively, place it back on the hive above the crown board with only a small hole uncovered ; the bees will clean it up. The super can then be stored until required, or overwintered.

Strain the honey

- Use a spatula to scrape down the walls of the extractor
- Bits of wax will have spun off into the extractor along with the honey so it should be decanted into a storage bucket via a double strainer. With a honey bucket, check the gate is tightly closed.
- The honey can be stored at this point for as long as required
- Strain the cappings separately

Bottling the honey

- Leave in the honey bucket to settle for 24 hours; air bubbles will rise to the top
- Any clean, sterile glass jar can be used to store honey
 - If selling, honey jars must be new and unused
 - Honey is a food product; follow good hygiene practice and labelling laws
- 8oz or 1lb jars are common sizes
- If the honey in the storage bucket is runny and the bucket has a tap, decant it into jars by running down the sides to avoid entrapping air

Crystallised honey

- Some honey like rapeseed sets very fast; this depends on the proportion of different sugars - fructose, glucose -in the nectar
- Scrape out the comb back to the foundation on both sides - carefully!
- Melt honey and wax together in a heated uncapping tray, bain-marie or cool oven ; wax melts at 62-66°C, which alters the honey flavour
- The wax will set on top of the honey and can be lifted off
- This heated honey is suitable for cooking - baker's honey

Cleaning up

- Use cold water to clean extractor, tray and tools, (follow with warm detergent if needed) and leave to dry thoroughly
- Clean up sticky feet and floors

Warming honey

- All honey (except perhaps heather) will eventually set; if it doesn't, it isn't honey - it could be counterfeit sugar syrup
- Some, such as rape flower honey will set quickly
- Warming it slowly - 8-24 hours at 37-40 ° C will melt the crystals, clear it and make it runny again
 - Commercial warmer
 - old fridge or insulated box with a lightbulb in it
 - cool Aga oven

Churned honey

- Creaming (warm) granulated honey will break the crystals into a smooth soft spread
- keep mixer below honey surface to avoid entrapping air
- Mixer that will fit into your container
 - Creamer
 - Mixing propeller on a drill
 - Plaster mixer attachment on a drill
 - Kitchen mixer with a strong motor
 - Potato masher

Labelling laws

- Honey(England) Regulations 2013. SI 2013 no.2243
 - <http://www.legislation.gov.uk/uksi/2003/2243/contents/made>
- Honey (England)(Amendment) Regulations 2015 . SI2005 no 1920
 - <http://www.legislation.gov.uk/uksi/2005/1920/contents/made>
- EU Food Information for Consumers Regulation 1169/2011 come into effect from 2014
- Food Standards Agency guidance
 - Quality standards: eg. sugar, free acid, HMF, water content; diastase activity, cleanliness
- BBKA website

Labelling laws

- No misleading information, either words or pictures
- No flavour claims
- Geographical or topological descriptions must be accurate
- List of allowed names eg. Baker's honey
- Apply to both honey and honey products
- Requirements differ, depending on whether selling directly to public or via a third party
- Keep records

Own sales

- description of the product
- your name and address
- lot number – could be “best before” date
- weight – letters 4mm high
- Allergens if a honey product
- Voluntary: not suitable for infants under 12 months

Sales via a shop

- Shop sales
 - All previous information PLUS
 - ingredients in descending weight order, and percentage
 - Best before date
 - Country of origin
 - Storage information