

## WCBA EXTRACTING WORKSHOP

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1. Hopefully you have surplus honey
  - A. Strong hives in early season—peak of dandelion bloom usually
  - B. Good swarm prevention methods: checkerboarding, young fertile queens, plenty of ventilation, prophylaxis against hive beetles, varroa, tracheal mites
  - C. Early and proper supering with good equipment: empty super over brood chambers (with or without queen excluder) rotate frames in from out when inside frames are filled, new supers as soon as  $\frac{3}{4}$  of former super is filled, or stack two or more and rotate as needed
  - D. Check early season super frames for cappings—move capped frames to upper supers a day or two in advance of removal—lets bees clean up open honey and allows more freedom of movement of bees to lower supers
  - E. To help avoid bee robbing while removing full supers, remove the telescoping and inner covers from all the hives in the apiary—keeps all the bees at home on defense
2. Set up for removal of supers (or frames)
  - A. Choose your method of bee ‘removal’
    1. Bee escape board, placed between the supers to be removed, and the lower remaining supers, will let bees out of the supers, but not back in, if you remember to put a screen over the top super. This could take a day or two, and beetles and moths may take advantage of the delay
    2. Pulling individual frames, brushing off the attendant bees at the hive, and removing the frame to a covered super in your cart or vehicle works, but is laborious. Best suited to a few supers
    3. A fume board, made to the proper size of your hive’s super dimensions, takes only a few minutes in bright sunlight. It **MUST** be used at each super to be removed, and won’t work well on cool, cloudy days.
  - B. Keep honey supers covered and move them immediately to an enclosed area, out of reach of foraging bees. A room with a screened window works well, as bees brought in on the supers will fly to the daylight window, seeking a way out. Keep the supers **WARM**.
3. Set up for extracting
  - A. Honey supers should be kept at a warm temperature to make extracting easy. To warm them up, stack supers over an empty hive body with a 40 watt lamp inside, and monitor the temperature of the stack. Don’t overheat the frames, or the comb will melt
  - B. If you intend to extract in your kitchen, a drop cloth or other floor covering is advised. Uncapping and pouring honey can be a little messy. Don’t turn the air conditioning on, and, for gosh sakes, don’t open any windows; bees can

smell honey quicker than you can, and they will come!

- C. Set up your uncapping area, and arrange the supers nearby. Set up the extractor just a short distance from your uncapping area, with enough room to get to all sides of the extractor.
- D. Hopefully you remembered to have a bucket to bottle from, and maybe a number of storage buckets (hopeful of a large crop)
- E. One filled shallow super frame, set up in a ten-frame super, will render approximately 2.5 pounds of honey, or about one quart. The same frame in a nine-frame super will render up to a third more, and remember to include the drainings from cappings. A separate bucket should be used for this.
- F. Pick out the method for uncapping:
  - 1. 'Cold' knife can be used, if sharp enough. A heating tray can be used to heat the cold knife, helping to cut through tough combs, but the knife needs to be wiped clean between cuts, and rewarmed.
  - 2. An electric or steam heated knife is an expense, but is much quicker and smoother to use. An uncapping fork can be used for small areas not cut by the knife.

#### 4. Spinning It Out---

- A. Load your uncapped frames according to the directions given by the extractor manufacturer. If the machine has moveable, reversible baskets, the frames can be loaded and reverse sides extracted at will, but you need to keep the machine balanced somewhat to avoid heavy vibrations.
- B. When extracting in a tangential extractor, i.e. one in which the frames are loaded with the comb facing outward, the first side, the outside, should be started slowly, and the first side run for just a short time to low speed, to reduce the chance of tearing the comb from the frame, due to the weight of the honey on the opposite, inner facing comb. The frame is reversed, and the inner comb, now facing out, can be fully extracted, starting slowly and building speed slowly until honey is slung free of the comb. The frame is then turned to the first side, which is then extracted fully. Some frames may require reversing more than others; cooler, heavier honey, or thicker comb may extract slower.
- C. Leave the extractor honey gate open—set up your catch bucket, with strainers On top, under the gate, allowing the honey to flow freely into the bucket. Watch for the level of honey in the bucket; you don't want it to run over!
- D. Empty super frames can be placed back in the supers, but should remain inside until the extractions are complete, and you are ready to remove them to the outside. This is best done quickly, and some thought given to where to place them for the bees to clean ('dry') them out. Note: In a small apiary, it may be easier to place empty supers back on the hives they were taken from to reduce the chance of creating a robbing frenzy.

#### 5. Let's Clean Up!---

- A. Scrape all empty equipment down with a good, wide rubber spatula, drain all the honey to the strainer, and cover the honey buckets and cappings bucket with a tight lid. Store all buckets inside, in a clean area, away from extreme heat or cold
- B. Cappings can be melted down immediately, or left to drain for a short period (1 or 2 days). Any longer, the product can be contaminated by wax moths or hive beetles, rendering the entire batch useless.
- C. Honey in covered buckets is safe if the area is dry and warm. Bottling can take place as soon as the bubbles have risen.
- D. The extractor should be rinsed down with COLD water, and the interior wiped down with a plastic scrubber, and rinsed with cold water again, until all wax particles are rinsed out. All interior parts of the extractor must be free of wax and propolis particles. Then the interior should be cleaned with ordinary dishwashing soap and warm water, then rinsed and dried out with a lint free towel. The machine can then be stored until the next session.
- E. Heat the knife slightly, then wipe excess honey and wax from the blade with a damp cloth. This may be repeated several times until clean of wax and honey, then washed with soap and water, and dried. Repeat with the cappings scratcher.

6. Some extra points and tips:

- A. Wipe down the extractor before using and dry wipe  
Wipe down all work surfaces  
Make sure the work area is clean and protect the supers from dust and debris  
Wipe down knife, cappings scratcher, capping tank, and dry them  
Use clean lint free towels and strainers  
Keep a few clean damp towels on hand for wiping hands and tools
- B. Supers that are kept off the hives, with or without honey in the comb are subject to infestation by hive beetles and/or wax moths, not to mention ants. To protect your honey, wait until you are ready to extract within 24 to 36 hours, or freeze your frames of honey to destroy beetle and moth eggs and larvae. After freezing, you will have to let the frames **warm up and dry off** before attempting to extract.
- C. Any honey removed from the hive should be tested to confirm that it is dry enough to extract, i.e. between 15.5% AND 18.5% water by volume. The best test is to use a refractometer, but using the simple 'shake test', that is, to remove frame without capping, but with full cells and holding the frame over the open hive, shake the frame abruptly to dislodge the nectar, will let you know what is too wet. Properly 'cured' honey will not shake out with one or two shakes. Honey that is not dry enough will ferment, and only a small amount of 'wet' honey will spoil your whole crop if mixed in.