



The Honey Company
pure, raw, all-natural
Since 1890

by Stan and Alicia Moulton
adapted from *Beekeeping in*
Northern Climates

Beginning Beekeeping Series

Lesson 10: Bottling Honey

One goal of successful beekeeping is a delicious jar of homegrown honey. Lesson 10 will cover a common way to bottle honey. We think it's easy and fairly inexpensive with DIY options.

Lesson 10 will assume honey has been extracted and is in a settling tank.



Figure 1. Jar of homegrown honey.

Supplies Needed

To bottle honey, we will need 1 settling tank, 1 bottling tank, 1 honey screen, 1 spacer, and containers to bottle honey. All of these are available from beekeeping supply companies. If you would like to save a little money, here is our DIY version. See Figure 2 for photo of the honey screen, spacer, and bottling tank. The settling tank is not pictured.



Figure 2. Bottling tank with spacer and screen.

To DIY, here is a list of materials needed for the whole bottling set-up.

- 3, 5-gallon buckets
- 1, 5-gallon bucket lid
- 2 honey valves, food grade, 1 inch or bigger
- 2 Threaded plumbing fittings to fit honey valves
- 2 O rings to fit plumbing fittings
- 1 Honey screen, purchased
- Jars to hold honey, like Mason jars or squeeze bears

Settling and bottling Tanks

The settling tank is used to allow honey to rest before screening the honey. Honey flows from the settling tank through a screen into the bottling tank, which holds the honey until bottling.

Settling and bottling tanks look exactly the same, but have different names and purposes. They are interchangeable. We use a 5-gallon bucket with plumbing valve attached for each.

You can use the extractor as a settling tank. This will save having another piece of equipment, but will take longer when extracting, as you will need to wait for it to drain before extracting the next set of frames.

Valve. Beekeeping supply companies sell the yellow gate-style valve pictured in Figure 2. They can be hard to find locally.

Figure 3 shows another valve that works for bottling honey. It is a food grade ball valve, and can be found at a local plumbing supply store, or Lowes or Home Depot. It needs to be at least 1 inch in diameter, otherwise you will be waiting too long for honey to flow out. 3/4 inch is too small. A 1 1/2 inch valve works well for larger jars, but a 1 inch valve works best for small (less than 8 oz.) containers. You will also need a threaded PVC fitting (like for sprinklers) and an O ring for the inside of the bucket. See Figure 4.

How to install the ball valve. First, decide on placement. Position the valve so there is a bit of clearance between the bottom of the bucket and the valve. When sitting on the counter, you want the bucket to rest on the counter and not the



Figure 3. Food-grade, 1-inch plumbing valve that works for bottling honey.

valve. You do want the valve pretty close to the bottom so the honey will flow out.

Next, trace around the PVC fitting with a pen on the outside of the bucket. Cut a circular hole in the bucket with a sharp, thin blade knife (like a pocket knife). Cut the hole undersize first and trim it larger for tight fit. This will help prevent honey leaks.

Lastly, place the O ring and plumbing fitting on the inside of the bucket, through the hole, and screw on the valve on the outside of the tank. See Figures 4-5.

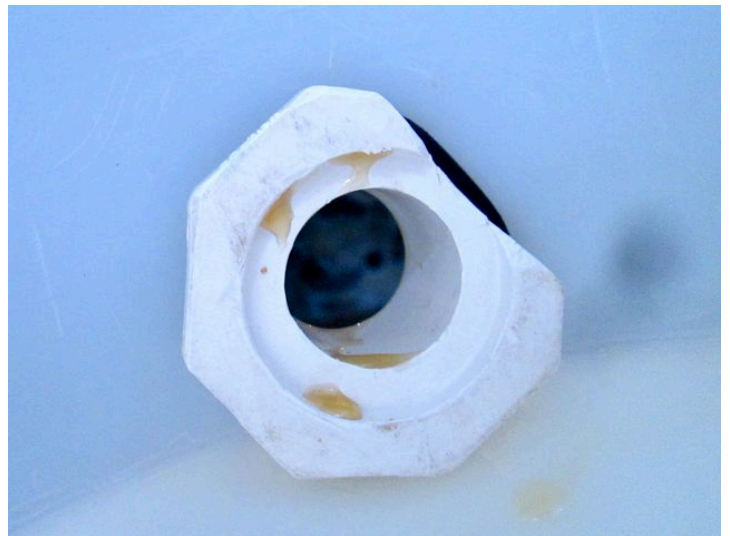


Figure 4A. O ring and plumbing fitting inside the bucket. The black O ring is just poking out of the white (and broken) fitting piece.



Figure 4B. O Ring and PVC fitting sticking through the hole to the outside of the bucket.

remove all particles smaller than 1 microgram, including any pollen, wax particles, bees' knees', etc. It is not necessary and there are benefits to having some of these particles in the honey.

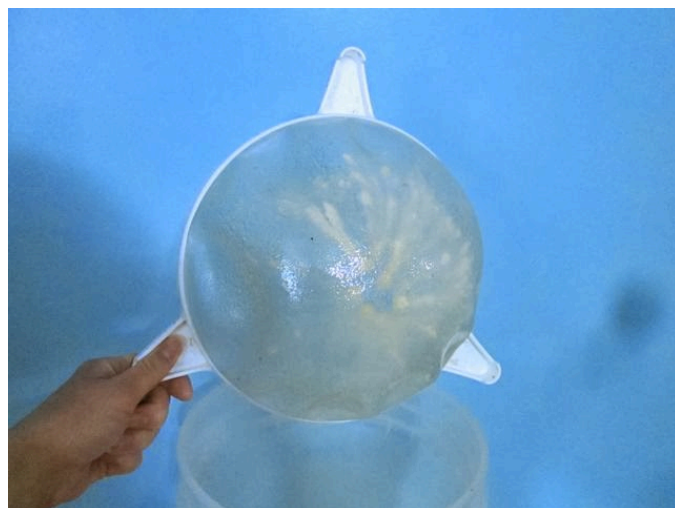


Figure 6. Honey screen.



Figure 5. Screw the ball valve onto the PVC fitting.

Honey Screen The honey screen is used to screen out large wax particles and bees' knees. They are available from beekeeping supply companies. The screen rests on top of the spacer or can also rest directly in a 5-gallon bucket.

*Note: A honey screen is different from a honey filter. A filter is something honey packers use to

Spacer. The spacer is used to keep the screen out of the honey in the bottling tank. The spacer in Figure 7 is a 5-gallon bucket with the bottom cut out.



Figure 7. Spacer. 5-gallon bucket with the bottom cut out.

Lid. To keep the spacer out of the honey in the bottling tank, we rest it on a 5-gallon bucket lid with a hole cut in the center. See Figure 8.

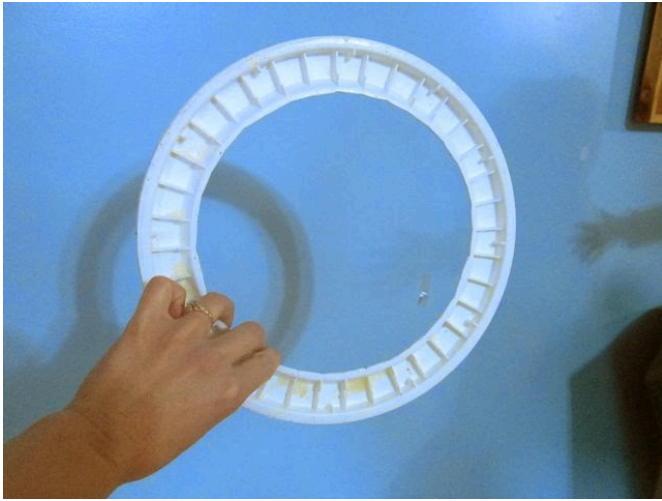


Figure 8. Lid with center cut out to raise the spacer above the bottling tank.

See Figure 2 for how the screen, spacer, lid, and bottling tank fit together. They go top to bottom in that order.

In another style of spacer, we cut the spacer bucket about 2 inches below the top rings. The 2 inches rest inside the bottling tank. This works well if you are not trying to fill a 5-gallon bucket clear to the top with honey. See Figures 9-10.



Figure 9. A shorter style of spacer.



Figure 10. Bottling tank with smaller spacer on top.

Containers Honey can be bottled in many styles of container. Glass or plastic works best. The acidity of honey can eat away at metal containers over time. We like Mason jars and squeeze bears. We have also purchased 5 pound plastic tubs and 1-gallon containers. Anything food grade with a lid will work.

Make sure honey containers are washed and dried before bottling.



Figure 13. Quart honey jar with comb.

How To Bottle Honey

Process: Start with honey in the settling tank. Elevate the tank by placing it on a counter, or other stand. Place the screen, spacer, lid, and bottling tank below the settling tank in a stack as shown in Figures 2 and 12.

Have a warm, wet washcloth ready in case of small spills.

Open the honey valve on the settling tank, and allow honey to flow down through the screen and into the bottling tank. This will filter any large particles from the honey. You may notice a substance that looks like sawdust in the honey. It is the small wax particles that made it through the screen. They float to the top. You can scoop them out, if desired. We usually leave them in.

After honey finishes running into the bottling tank, close the valve on the settling tank. Then place the bottling tank onto the counter, and place your desired honey container under the valve. We place the container on a stool under the valve so we don't need to hold it while it fills. Open the honey gate and fill the container.

When the jar is almost full, close the valve. Quickly place the next jar under the leftover honey stream and reopen the valve. Try not to wipe the valve with a washcloth after each jar as the water can cause mold and bacteria growth.

Attach the lid to the full container tightly and enjoy.

***NEVER leave the room when a honey gate is open.** Honey spills take significant effort to clean up.

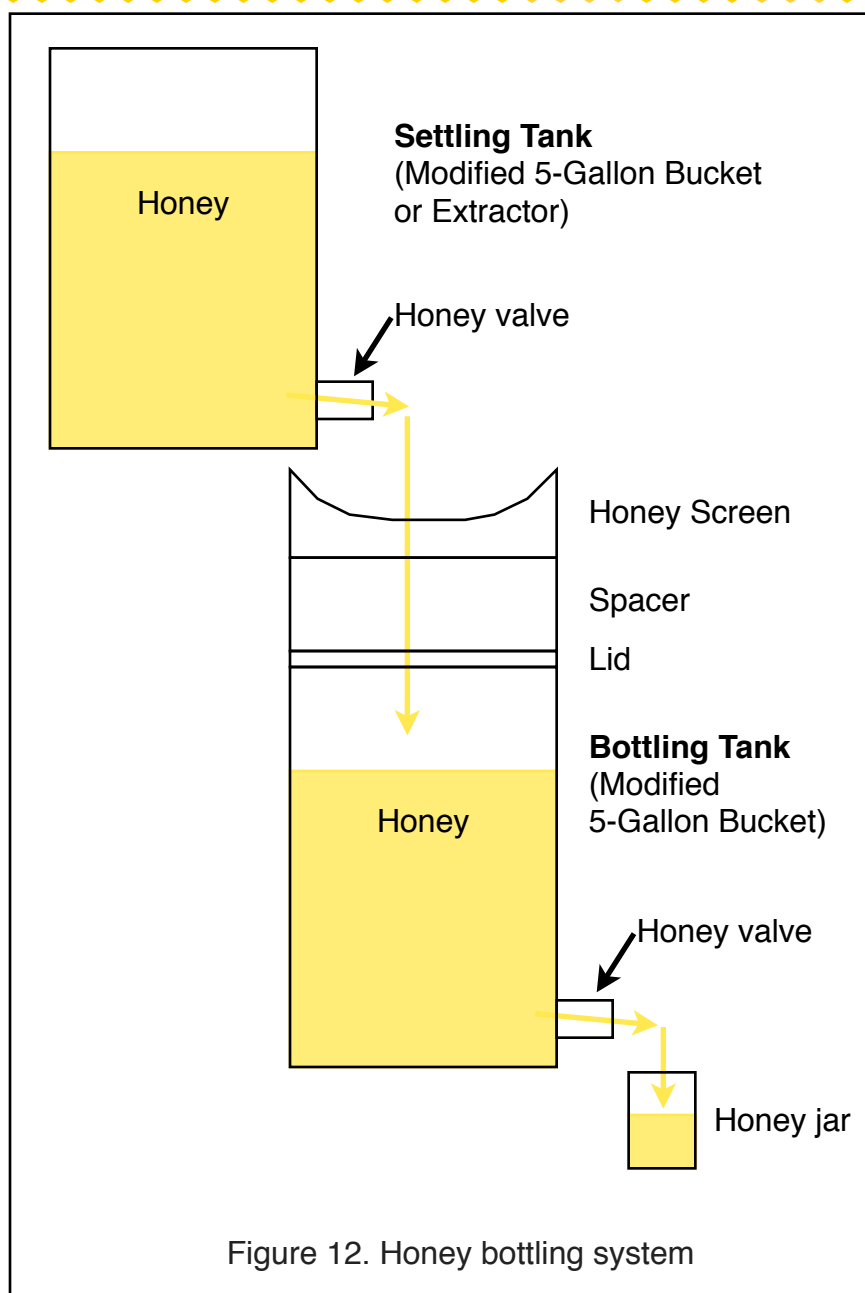


Figure 12. Honey bottling system