

STAHLMAN BEEKEEPING

NOTES FOR 2023

Issue # 31 August 19, 2023 Honey granulation – Comb Honey



Some beekeepers produce a lot of honey such as shown in this photo. 2023 photo by Greg Stahlman.



Working with large containers of honey require special handling equipment. And honey storage is solved in many ways.

The problem is -- honey does granulate which can be a problem!

I am going to share how I solved my honey crystallization (granulation) problem. I do store my extracted honey in 5 gallon buckets and by the time I get around to bottling my honey it often has granulated in the bucket. One option I have used is the 5 gal. bucket heaters that are [like a heating pad] wrapped around the bucket. I am not completely sold on them.

Putting jugs or buckets in a tub with water heated by a turkey propane cooker is not for me either. And then there is the problem with bottles that could be put in a sauce pan on the kitchen stove.

I wanted something that would do a good job and did not require much attention or time.

I will share at the end of this article some suggestions that have been given to me that others use. My solution may not be for you.

I wanted something that was cheap or free. Something that could be used in cold weather. The sun provides many ways one can liquify honey during summer months – put honey jars in a car for example. One could build a solar box [somewhat like a solar wax melter].

I found my answer when I spotted a discarded small refrigerator sitting along the road with a sign on it that said free. I wasn't worried about [Did it

IMPORTANT POINTS

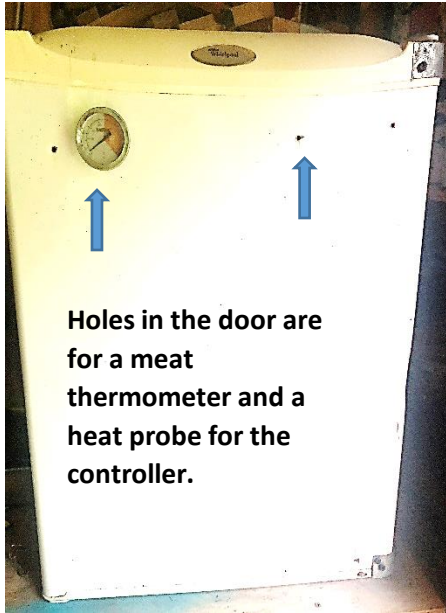
Historically, the only pure honey was that honey stored in honeycomb and served at the table in a container known as a honey dish or plate...



Those who collect honey dishes and skeps can find a lot of new items listed under a search for honey.



This is my friend Duane Rekeweg who owns the largest collection of honey related glassware I am aware of in the U.S.A. He and his wife have collected items over a lifetime. See his comment about comb honey on page 3



Holes in the door are for a meat thermometer and a heat probe for the controller.

work]. What I saw reminded me of something that was insulated, and something that did not take up a lot of room.

It was a small apartment refergerator!

All I had to do was install an electric light to provide the heat needed to



liquify the honey. Drill a few holes in the door for a thermometer, and a probe for a digital temperature controller.



It had shelf space that was removable. It was just big enough to handle one 5 gallon bucket and a number of various sized honey jars.

Later I added a small fan to distribute the heat more evenly.

Comments: One can control the temperature of a 60 watt bulb. I found that a 40 watt balb worked as well. The interior of the refrigerator is plastic and without the temperature controller, the temperature in my heated box got too hot without constant attention.

Using a refergerator of a larger size would answer the need for those needing to heat more jars or buckets.

The only thing I had to buy was the temperature controller at something like \$30.00. I had on hand an old lamp which I dismantled for the light socket. I have used this bottle/bucket warmer for a few years with complete satisfaction. As shown in the picture of the interior, the shelf above the light is a bit bowed due to the weight of 5 gallon buckets. I need a stronger support shelf.

Just remember when heating honey, gentle heat well distributed around the honey container is essential for liquifying honey.

- *Plastic containers can melt and glass containers are too hot to pick up!*
 - *Hot liquids can be hazardous to handle.*
 - *Overheating honey will cause the honey to lose its enzymes, antioxidants, and other important health advantages.*
 - *Heat applied to plastic bottles may expose the honey to chemicals released from the plastic.*
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A few ideas sent to me regarding what others have said about liquifying honey.

I've been putting jars of granulated honey in my dishwasher for 20+ years. Works well for me, even plastic bears. I suppose some dishwashers get too hot but mine doesn't seem to have any negative effect on the honey. I thought I was alone doing this, but I heard others in our club doing it too. Maybe you could address that, pro or con in an upcoming "Stahlman Notes". Also, curious what you will recommend de-crystallizing 5 gallon pails. Sent to me by John Flemming.

The microwave oven works if used in short burst of 15 seconds. I have tried this and it works fast – too fast in some cases. Glass jars only – not two pound jars or quart jars. By the way, remove any metal lids. Plastic bears will melt and sag if heated for 30 + seconds or more. Sent to me by Marty Russell.

Put honey in a car on hot days. The heat will liquify honey. Shared by Shane Woodruff in a phone call.

The following comments were provided to me by Duane Rekeweg concerning my request about honey granulating in the comb.

He produces cut comb honey for customers. I really appreciate the information he provided for all of us. : Duane has been involved in giving presentations and talks over a number of years. I highly respect his knowledge and his willingness to share information with us. He wrote:

You need a strong hive to produce comb honey. We start by installing a queen excluder, a shallow super and a medium super on the hive in the spring. We use a queen

excluder because no one likes larva in their comb honey. A honey flow is also needed. We run about 600+ hives in Northeastern Indiana. We produce 30 supers of comb honey each year. Once we find a hive that is putting honey in the shallow super, we remove the medium super and put on the comb honey super above the shallow super. Then we put the medium super on top of the comb honey super. The shallow super acts as a place for the bees to store some extra pollen and not in your comb honey. You will need to use beeswax comb honey foundation as the comb foundation has no support wires in it. Customers do not like eating wires in their comb. When installing your foundation, we like to use a full sheet of foundation of the size you need. Do not let the foundation touch the bottom bar, leave about a 1/4 of an inch gap on the bottom. The bees will draw the foundation enough to fill in the gap. If you do not leave that space, your comb honey could bow at the bottom. We use 9 frames in a 10 frame box all spaced evenly. Once bees start drawing the foundation, you may trade the outside frames with the center frames, bees don't like drawing the outside frames. We check the supers about every 3 weeks. Some bees will not touch comb honey. When we find a comb honey super that is not being touched by the bees, we just move the super to a different strong hive. When the comb is drawn out, filled with honey and capped, it's time for harvest. We like to use a triangular bee escape to remove the bees from the comb honey. We cut the comb honey on a screen that will drain the honey off the comb. We make a pattern for the size of the comb piece we want to cut. Let the comb drain overnight. Put the comb honey in containers and freeze for at least 24 hours. Freezing stops wax worms from hatching and keeps the honey from granulating. When thawing, cover with a towel to prevent condensation. Comb honey can be kept in the freezer for over a year. Comb honey is best if it is sold within 12 months.