

SUCCESSFUL BEEKEEPING

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CUSTOM EXTRACTION: DONE THE RIGHT WAY

PURPOSE: to provide custom extraction for hobby beekeepers and to create a set of rules to prevent disease transfer.



At the age of 80, I run only a few hives, a breeder circle, and a practical course for new and established beekeepers. While talking with these beekeepers, I found out that they have problems with honey extraction and a lack of honey supers. My extracting equipment sits mostly empty and while it is better than any small set up you can buy; I am unable to sell it because it is custom made to fit to my honey house.

Necessity is the mother of all invention and when I was building my beekeeping business, I used my education in engineering and tool making to utilize two old extractors. I converted two old hand cranked extractors to be motorized and hold 20 frames each.

Also, my honey house is built into big hill where I ran into bedrock which limited and protruded into my planed space. So, I made my honey house two levels and built it around the bedrock. I created a 32-inch raised 3-foot wide loading platform across the back of the honey house and an odd shaped equally high platform that would house the hot room with dispensing tanks. The tanks would dispense honey through the wall into a ground level

retail space. I then designed the extractor set up and metal platform on which the extractors sit. I refurbished the extractors, replaced the bearings, painted and insulated everything. Further, I designed an unlimited ratio transmission for the extractors capped with a circular steel plate and powered the extractor running wheel by a gear motor mounted on threaded shaft. By cranking the shaft, the powered rubber wheel travels from the outside of the circular plate on main shaft to its center increasing the extractor speed. Honey runs out of both extractors into the separator (NOT on this picture) where honey sinks and wax and other debris float to the top. Two return pipes are placed into this separator so clean honey can flow into a settling tank or into a barrel lined with a cheesecloth strainer bag. When the barrel is full, we gather the cheesecloth bag and, through a series of pulleys, attach a steel weight to it. This weight slowly pulls the strainer bag out of the barrel. The entire system is hot water heated, gravity fed, with no pumps. The year 2000 was our best honey year ever and we extracted 41 barrels of honey with this system.

FOR THOSE WHO WOULD LIKE TO USE THIS SYSTEM:

There are a few rules to follow. To prevent diseases, you must use queen excluders between your brood and honey boxes and you can only bring in honey supers that have never been used for brood. Also, I RESERVE THE RIGHT TO REFUSE EXTRACTION TO ANYONE. Further:

- 1- Deep old comb (9 5/8") with stale honey will break in the extractors. Give it to the bees for the winter.
- 2- If you need to draw out new deep comb, put foundation combs on strong hives over a queen excluder. Then at the end of the summer, it can be extracted and you can use it in the following year as brood comb for splits. Remember, a full box weights 100+ lbs.
- 3- If your frames have wax foundation, the foundation must have 10 vertical wires and 4 horizontal wires for a standard deep frame, and 2 wires for a dadant or a shallow frame. These boxes are lighter (approximately 60 lbs so they are preferred)
- 4- The sides of the frames must fit into a cage pattern. Homemade or full width size frames will not fit into the extractors and will break.
- 5- We will sample and taste the honey. Sage honey and odd tasting honey cannot be extracted as some will get mixed into the system and spoil the Okanagan Blend honey.

You will be doing the extracting:

- 1- We will show you how to extract honey. It is not rocket science and I will be around to solve any problems. You will get sticky, handling the honey and combs. Also, it is very hot in the honey house as honey does not run when it is cold.
- 2- You must be able to carry your boxes from your truck to the scale and then onto pallets that can be wheeled into the hot room. We record the weight of your boxes and measure the temperature of your comb. Most of the time it takes overnight to warm up comb to 90F/33C. In all likelihood, you will come extract your honey the next day. Generally, you can come at a time that works for you, we are flexible.
- 3- You decide how and what honey you want. We know how much on average empty boxes weigh and therefore can estimate how many pounds of honey and wax will be extracted.
- 4- OKANAGAN BLEND is the easiest and cleanest honey you get by running your honey through the separator and into the settling tank. Your honey will mix with our honey or the honey from other Okanagan beekeepers. You can taste it and compare it to your own. It will be absolutely clean.
- 5- 90%+YOUR HONEY can be harvested from the separator tank. You clean and drain the separator tank and your own extracted honey will fill it. The capacity of separator tank is 150 pounds. If you have more honey than this, we can have it drain into your own large containers. You can also drain the tank into mason jars or other containers from the bottom of the separator tank. This honey will be partially "raw honey" as it will contain some wax. The wax needs time to settle and float to the top. You can also use a straining bag to strain the honey overflowing into your large containers or barrels. Small metal barrels work well and can be easily skimmed of wax and honey melts well in them.

How much does it cost? 20% of the weighed wax, honey and capping you extracted.

You will be scratching you capped comb into a common stainless-steel tub. At the end of the season, this wax will be melted and separated into cooking honey and wax. It is a mess and no one wants to take it and separate it home. It is a part of the 20%. The rest of the honey flows into the settling tank and it is sold as "New Okanagan Blend" honey.

When all your boxes are extracted and you are ready to take them home, we will weigh them again. We take the weight of the boxes you brought in full of honey, deduct the weight of your empty boxes. We deduct 20% from this total and that is how much honey you get to take home.

Taking honey home: You can bring in any type of container to put your honey in. We will weigh the containers empty, and as you fill them, we weigh them until you reach the total number of pounds of honey, we calculated that you get. My recommendation is to use any size mason jar. Since they are glass, you can safely and easily heat them to melt the honey once it has crystallized. You can use larger pails but remember that honey will crystallize and become hard and difficult to manage. If you are using large pails, I recommend large metal ones so they can be heated in order to liquefy the honey.

Give me a call if you are interested 250-762-8156 OR email: billruzicka@mitgone.com