STAHLMAN BEEKEEPING NOTES FOR 2023

Issue # 16 April 22 , How much is an idea worth?

I am more of a fly-by-my-seat sort of guy when I travel. I know where I am going but nothing is in concrete. I am flexible. Beekeeping is not quite that way. Some things in beekeeping require exact planning – something like making sure a hotel or motel room is available before starting a trip.

Extracting is a good example of planning. I know at some point in time I am going to have to take supers off the bees so honey can be extracted. What I don't know is when – other than an educated guess.

Taking supers off hives is heavy work. There are problems assocated with that work.

- **The methods used to remove bees from honey frames vary.**
- **How are the cappings going to be removed?**
- **What kind of equipment or methods are needed to get honey from frames into bottles or containers?**
- **What do you do with the honey after it is in a container.**
- **Does honey stay a liquid forever?**

There are experienced beekeepers who have equipment and experience in all of the above. Lets call them the "experts" because they have invested in equipment, learned that honey is sticky, draws ants, hive beetles, honeybees, and customers expect clear, clean good-flavored honey. They don't expect bee legs and wax particles floating around in a bottle of honey.

I remember a story about a beekeeper by the name of Hawley Prendle. He always extracted honey in his wife's kitchen. She was fussy about his inability to leave the kitchen spotless when he had completed his honey extraction.

Many beekeepers use basements, garages, or rooms in a house or building for extracting honey. Some even extract outside! A special honey house for a hobby beekeeper is out of the question. Honey houses in some states require health inspections that check on things like clean floors, sinks, appliances and require separate storage areas for bee equipment. Many states require both hot and cold running water and a check for anything that might contaminate honey – like storing chemicals, thing that attract rodents, ants, roaches or unhealthy contents – something like honey stored too long that has been slimed up with small hive beetles. They inspect for anything that might get into the honey during the extraction and bottling process. An old extractor may have used lead as a seal in joints. That will get your extraction equipment flagged real fast.

IMPORTANT POINTS

Judi and I visited Ohio this past week. So many friends came up to us – smiled and hugged us.

Friends are part of us! One thing I have learned about beekeeping is how important it is to develop contacts – it is giving and receiving.

I also learned how weather affects beekeeping. We left Raleigh – temperature 90° and arrived -- temperature 40°.

Judi and I stepped back into spring.

The reason for the trip to Ohio was to share my past -- helping a new bee club get started. The beekeeping organization today consists of 300+ active members, and 140 brand new beekeepers taking the beekeeping class. I was their first speaker and they remembered me. There was a lot of LOVE all around!
The group was ECOBA (East Central Ohio Beekeepers Association).

More on this in upcoming issues.

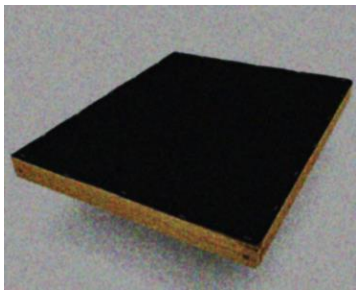
When you think of commercial bottling facilities, I know of one case in which a company had to spend $50,000.00 to replace a concrete floor because a large crack had developed. The company tried to patch it but the health inspectors rejected that solution. Any metal touching the honey had to be stainless steel. Employees working in the bottling plant had to wear hair nets and gloves.

Well back to Hawley extracting honey in his wife's kitchen: I am sure he cleaned his extractor, had clean bottles in which to put the honey and had hot and cold running water available.

He moved the kitchen table to one side of the room, and put down a heavy plastic tarp. He set up his extractor on a little platform he built for that purpose and after the extaction of honey had been completed, he covered the kitchen windows (two of them) with heavy paper so light was blocked from coming into the room. He turned off all the lights. I might mention that the kitchen had a door that was used to shut the kitchen off from the rest of the house. Maybe you are now asking why did he turned off the lights. Often bees hitch hike on combs brought into the kitchen. Hawley knew the rules: a clean kitchen free of any sticky honey, and no bees flying around in the kitchen after he was done! The answer, Hawley opened the outside kitchen door and the bees seeing light flew out on their own. "That works as long as the bees haven't started robbing behavior."

- **The methods used to remove bees from honey frames vary.**
  - **Brush bees off of each individual frame. A lot of bee disruption may cause bees to become aggressive. Equpment required – A bee brush.**
  - **Blowing bees out of the honey super to remove bees on the frames.**
  - **This is an old picture I took showing bees being removed from honey supers with an old Kelley Bee Blower.**

Today's bee blowers are portable and easy to use. The bees when blown from a super like this take a bit of time to figure out just what happened to them. They may gather some distance from the hive before returning to it. Hive boxes are set up on a stand and the air is forced between frames. Just don't blow the bees in the direction you expect to walk or work.



- **Fume Board or Fume Pad This is a preferred method by those that remove large amounts of honey supers from hives. It requires less labor, is quick, and has less impact on the bees. It can only be used when temperatures allow a fumigant to vaporize. The down side is-- if a fume board is left on a hive for some time, it will drive the bees out of the hive. Some also worry about the odor that might affect the honey. How it Works: A bee repellent like Bee-Go or Bee quick is applied to the felt underside of the fume board, then the board is placed above the honey supers. Bees are driven into the brood chambers, leaving the supers bee-free and ready to harvest. A fume board is nothing more than a rim, a felt pad and a cover (Metal or something black to gather in the sun's heat)**

- **One other method is the use of bee escapes. They can be used with the inner cover hole which allow bees to travel in one direction out of the honey super but no way to return. There is also an escape screen sometimes called a triangle escape screen. These take some time for bees to leave super and generally operate on the principle that when it gets cold, bees will move down from the honey super to the brood chamber. The bee escape then prevents them from going back up into the honey super.**

Every beekeeper will develop a preferred way to remove bees from honey supers. Now that I have only 3 hives, I use the bee brush. When I had a lot of hives, I used a bee blower and on occasions the fume board. The problem with fume boards in my opinion is with storage. They need to be stored where the smell does not carry into areas where people work or live.

- **How are the cappings over ripe honey going to be removed?**

- **This picture shows a frame with some of the cappings removed. Cappings are pure wax that protect honey. The cappings hold honey in the cells.**
- **The example shown was uncepped with a hot knife. Any bee catalog will list a number of uncapping tools. I use an electric heated knife and it works well for me. Note this frame of honey. The bees will build comb beyond the top bar making it easy to easily remove the capping with a knife.**
  - **The secret to getting the bees to do this is to use one less frame than a super normally holds. For example, 8 or 9 frames in a ten frame honey super or 7 frames in an eight frame honey super.**
  - **The ways to uncap a frame of honey are varied from capping scratchers , to commercial uncapping equipment. For the hobby beekeeper, I would suggest owning both a cappings scratcher and a heated knife. When honey is capped below the level with the top bar, it is hard to remove cappings with the knife. The capping scratcher is ideal for getting the low spots the knife will not get.**
- **One other way to get honey out of a comb is by crushing the comb. This destroys a lot of good work done by the bees building the comb. For a beekeeper expecting to get a honey crop year after year, remember it takes resources for the bees to build wax comb. The time and resources to build comb will reduce the amount of honey stored in any one year. Drawn comb is a valuable asset for the beekeeper.**
- **What kind of equipment is needed to get honey from frames into bottles or containers?**

This is called extracting.

One can purchase an extractor or borrow one if available from a friend or club. An extractor can be hand driven or electric.

A person with just a few hives can get by with a hand operated extractor. As hive numbers grow, the extractor needs to be larger and motor operated.

Honey is removed from the extractor. A honey gate in the extractor allows the honey to pour into a five gallon bucket. From there it can be filtered and bottled.

This is raw honey. It will need to be filtered before it is bottled.

Note the wax chips floating in the honey being removed from the extractor.

Most beekeepers will use a straining bag or filter to remove these unwanted particles. Just remember, it is easier to work honey when it is warm. Cold honey does not go thru filters very fast nor is most of the honey removed from cold honey frames.

When honey is removed from a frame, the frame is usually referred to as being "wet." It will still be very sticky – not all honey is removed. Those honey supers can then be returned to the bees or set out for bees to clean them up – encouraging something called "robbing."

I have used this picture to show a beekeeper operating a number of hives. The honey house picture show machinery that takes a frame of honey inserted by hand into a rack that carries the frame down into an uncapper which then travels down a line toward the extractor. A ram pushes frames into the extractor while the frames just extrated are pushed out. The extracted honey is pumped into a wax spinner that separates the wax from the honey. The honey is then pumped through a filter into a honey storage tank that holds a thousand gallons or more of honey at a time. The wax in the mean time is placed in a heated wax melter and at the end of the day, the honey is clear of debre ready to be put into 250 gal. totes or 50 gal. drums and the wax is stored as beautiful blocks of yellow wax.