Apis m. Esoteria 25 Crime Perpetration 101

"How to rob honey"

HOW DO YOU KNOW IT'S TIME TO ROB HONEY?

You must look in the honey super. You must know what to look for. You must know how to interpret what you see. Then you must know what to do with the supers.

Before you think you are ready to collect your honey you need to get prepared during your normal hive work. One big question is "Do I top super or bottom super during the nectar flow?" This is a personal preference. There are advantages to both techniques.

Top supering is the easiest. As the nectar flow progresses you periodically add supers. If the bottom super isn't full and capped it makes very little difference. The bees will keep working until it is full and then move up to the next super, capping the ripe honey as it is ready. When you come back to inspect the progress of finishing the honey you only have to pop the inner cover and look.

Bottom supering has two advantages. The first is the storage bees don't have to travel through the capped supers to deposit honey higher in the colony. This may speed the total "turn around time". That is the time necessary to get nectar from the plant, convert it to raw honey, and deposit it in the cell. This will allow all the bees in that processing chain to be ready for the next load sooner. The second advantage is: if you need the finished honey super spun out and ready during the same nectar flow, you can lift it off the top as soon as it is finished and take it to the honey house without disturbing the workers in the unfinished supers. You cannot distract the bees from finishing the super. If your bottom super has empty frames the bees will walk across them until the unfinished super is nearly done. This is a population density situation where you would like to have a large enough population of in hive worker bees so that there are so many bees finishing the work it will progress and many bees will still be available to start the empty super.

Once it is completely capped, the top super can be so far up that it exceeds the theoretical hive colony space. The bees won't need to work it, so being above the theoretic 1 cubic meter is immaterial. The emptiest 2 supers will be directly above the brood chamber where the bees will work most vigorously.

A good supering technique just keeps empty supers available to the bees as soon as they need them.

You know your super is ready for removal when 75-90% of the cells on both sides of the frame are capped. The more cells capped the better. You can't fool the bees. They will not cap the honey until it is dehydrated to 18% moisture content. This prevents fermentation during storage. You are close to okay if 90% are capped and the other cells are completely full of honey but not capped. If the open cells are full of raw honey, they will have much higher moisture content than a cell that is full and in the process of dehydrating. What if you have whole frames full of honey that are not capped? This means the ambient air humidity is so high that the bees cannot bring the honey down to 18%. You can leave it on the hive and let the bees do their work or make a decision to remove the honey and draw the moisture down in the honey house with a dehumidifier. You can use a hygrometer to measure the moisture in the honey. If the nectar flow has stopped and there are still open cells the bees will eat their own honey to create wax to finish the capping. In this instance you might see bees eating raw honey in the upper/outer edges of the supers to make this wax. To test the moisture content of the honey in a group of open cells, vigorously shake the frame over the open hive. If the honey is thin enough to come out of the cells it is significantly above 18%. If it mostly does not come out it is nearly 18%. The honey can then be extracted which will mix it with honey that is 18% or less moisture content and it will be okay in the total mix.

BEFORE ROBBING

Collect buckets Clean equipment Buy jars and lids Clean work area

TOOLS REQUIRED FOR ROBBING

Bee suit (veil) Gloves Blower Hive tools Wagon

Smoker? Frame gripper? Bee brush? 2 Telescoping covers?

HOW TO ROB HONEY

The bees will be mad! There is a fine line between brave and foolish! I say get used to being stung a few times, but don't bee foolish.

I don't like to smoke the hive, but if you do, don't fog the entire area creating BBQ honey. But there may be a market for pine flavored honey. Very lightly puff the front entrance. Do not open the top cover and smoke the honey super.

Learn to rob honey without chemicals. Any chemical in the hive is less than the best situation. The instructions say a few drops on the fume board and they mean a few. The hotter the outside temperature on the day of honey removal the faster the chemical works and the more the smell can penetrate the honey. Don't try to drive the bees down 3 layers of honey supers using more chemical or leaving it on the hive for a longer time. Do one super at a time. It is slow work, but your honey will turn out better.

Bee escape gates work, but it can take 24 hr. to get all the bees out of a super. You will need one for every hive you work.

AH, AH! How do I get rid of the bees? Pull all your honey supers off the hive. Turn them up on edge on the top of the closed hive. Take out the "Super Tornado" leaf blower and fire it up. Start on the front row of hives and blow the bees away from the hives. Blow most of the bees out with the wind going from the top bars through the super. Finish with less force blowing the last bees sideways or whatever. The 150 MPH wind can blow your frames out of the hive if you blow from the bottom bars. That is why you start blowing through the top bars. Once most all the bees are off that super take it to your truck (wagon) which is 30 feet away. Place the super on an upside-down telescoping cover. Place another cover on the super to keep bees from coming to your truck and robbing the frames while you work. You can also use a slightly damp towel to cover the top of the super pile. The more supers you have the more you have to

accept hitch hiking bees. Drive faster on the way home and some bees will blow away (not really).

Most of the bees will be disoriented in the apiary and go home. Once the first row is done, start on the second. If you do this backwards you will be blowing bees onto the supers you still need to get the bees off of later. DO NOT blow the bees at your helper.

After your supers are pulled you have two tasks to complete. Keeping the hive from swarming and storing your supers until you can get the honey spun out.

SWARM PREVENTION

Once you have pulled the honey supers your hives will have too many bees for the volume of the hive. The hive body will be full of food and brood. This will stimulate the queen to want to swarm.

The easiest way to interrupt this swarm though is to put an empty honey super on the hive creating space and work for the bees. This is a good time to draw new foundation to comb for next year's honey collection.

Another option is to create splits growing new hives for next year. This will give you more hives than you may want. By starting the winter with extra hives, you may have enough colonies survive the winter that you do not have to buy new bees next spring. If you have a good survival rate, you can sell your hives to your buddy who didn't do so well.

WAREHOUSING SUPERS

Supers of honey will absorb ambient moisture from air. Store your supers for as short a time as possible. Large volume operators have special cooled and dehumidified warehouses. The rest of us have the garage. Make sure you have a clean dry location for your honey supers, preferably in a sealed room (basement or honey house) where you can run a stand-alone dehumidifier. Air conditioning

is nice but usually only dehumidifies to 40%. In a real nice room, you can cross stack the supers to allow air circulation. In the garage, you will want to stack tight, with a sealed top and bottom. This keeps the mice, flies, and bees out. Extract your honey as soon as possible. You might have hive beetle eggs that can hatch and ruin your honey while it is stored. The beetles will also be attracted to your stored supers.

Once the supers are extracted take them back to the apiary and place them on the hives so the bees can lick the left-over honey up, cleaning and drying the honey supers ready for storing until next year. You can cross stack the supers out in the yard and the bees will clean them up there also. However, putting them on your own hive gives the honey back to your own bees versus feeding wild bees and your neighbors' bees. I put more "wet" supers on my weaker colonies just to help them get more honey to store.

I also let the bees lick my extractor and decapping tank clean before washing and storing them.

HONEY PROCESSING

Cleanliness, cleanliness, cleanliness. The bee colony is as clean as a food factory. Even though honey is self-cleaning, this is food and the processing needs to be completed in the most sanitized area possible. Use lots of hot water and wipe up regularly as you work. Keep your hands and utensils clean. Don't lick you fingers as you work. Don't sweat into your work. Wear a sweat band and change it. Have multiple buckets of wash water available and change it regularly throughout the work day.

Clean all your equipment a reasonable time before starting to work so it is completely dry. Water will ferment your honey. Sanitize as necessary. Bleach and water work well, but it must air to get rid of bleach smell. Iodine is a good sanitizer that just needs to be rinsed off. "Crystal Bright" is a commercial product for restaurant china and glasses.

Process your honey when the temperature is up. 90 degrees is a good temperature. 80 and up will do. You want the honey to come out of the comb easily and flow wherever you want it. Even from the centrifuge to the bucket, warm honey will run through your screens more easily.

I like to double filter out of my centrifuge using the standard screen set of a 200 and 500 micron one nested into the other.

I use 2 sets of everything so one can drain while using the other. I use the screens under the tap on the centrifuge which is set up high enough to accommodate a 5 gal. bucket. As the screen clogs with wax, I will move that 5 gal. bucket to the side and start filling the next. With only about 3 gallons of honey in the filtering bucket, I pour the honey into another storage bucket with lid after the screen has drained.

Should you use 1 gal., 2 gal., 3 gal., or 5 gal. buckets?? 5 gallons of honey is a heavy bucket full (60 lbs.)! A 5-gallon bucket under the centrifuge holds about 3 gallons of honey before it reaches the bottom of the filter screen. Then I pour the honey into 2 ½ - 3-gallon buckets for transport or storage. I don't have any honey tanks. I can stack these buckets 4 high for storage. The height is governed by how high I can lift.

Once honey is in a storage container, seal it against ambient air moisture. Open topped stainless steal tanks are not ideal for long term storage unless the entire room humidity is controlled.

It is best to use new clean buckets. Frosting buckets from the bakery section of the grocery store are barely acceptable because of lingering flavors. Pickle buckets are never acceptable.

The nicest thing about all this work is the satisfaction of lots of excellent honey. The second nicest thing is how soft and supple your hands are from working the honey and wax.

Bottle your honey as soon as possible. Don't let the honey sugar in a 5 gal. bucket.