

1999 ABF WORKSHOP Optimizing Honey Production

This was originally assigned to my Bee Partner, Ann Harman, to present; but last week Troy Fore found a more important job for her and he asked me to substitute for Ann, knowing fully well that my strokes have given me some voice problems, so let us work together and see how it goes.

I reckon that I am different than others, but I have trouble talking about honey production without talking about the sale of honey. I don't believe that most honey is produced to be given away, and when you sell honey, you want as much money as you can get HOPEFULLY. Hence, I intend to talk about both the production and the sale of honey.

There is little sense in even mentioning the weather, because that is a variable that you cannot change. However, most of the other variables of honey production are under your control and it is these that we want to talk about.

There is little argument that the singular most important asset to high yield honey production is colony strength of foraging age bees! It is a well proven fact that one colony of 60,000 bees can produce double or triple the amount of honey as two 30,000 bee colonies can produce. A bee is basically a "house" bee or "nurse" bee for almost the first 3 weeks of its life and only functions as a forager during the final three weeks of its life. From the day that the queen lays a worker bee egg until that worker becomes a foraging bee is 40 days, 21 days gestation and about 19 days as a "house" bee. Hence, if your main nectar flow starts about May 10th and lasts for three weeks (May 31st), the egg to produce a foraging bee ready to forage on May 10th had to be layed BEFORE APRIL 1ST!

If your location is similar to central Maryland which has a cold winter, a very short spring, and an EARLY nectar flow is your Main crop. To gain this early large population, you have to use three procedures: feed 1:1 sugar syrup beginning about Feb. 1st to stimulate queen egg laying; have a 1st year young queen to retard swarming; and feed a pollen substitute or real pollen beginning Feb. 1st, particularly if you are using Carniolans because they are extremely pollen dependant. Doing this, you are pushing the bees rapidly right into the normal swarming season (the period just before a strong nectar flow). Hence, you have to use some or all the swarm prevention methods that are known, but mainly, you must prevent brood chamber congestion. REVERSING brood chambers is very important, and may have to be done 3 or even 4 times. Replacing frames of capped brood with empty drawn comb frames might have to be done. This is the work of a talented beekeeper, not a task for a beginner or a beeHAVER. Basically what you are doing are forcing your bees into a population "explosion" with out letting them get into a swarming mode, a program similar to producing GOOD comb honey sections (which is how I started in the Depression Days of 1933 -36). Repeating: queen must be young; feed1:1 syrup; feed pollen, use swarm prevention techniques

Install supers of DRAWN COMB all at one time just before the start of the strong nectar flow. Honey is only about 16-17% water, but nectar might be as much as 80% water. Hence, bees have to have EXCESS super space in order to store the nectar until they can ripen it into honey. I use about 60% more supers than will be finally filled with honey: e. g., from past experience, my bees will average about 120-130 pounds of honey yield/colony in May. A 6 5/8" (Illinois) super holds about 40 pounds of honey when filled, so I produce about 3 full supers/colony. To allow plenty of storage for the nectar, I super each colony on April 15th (helps me forget it is TAX day) with 5 supers of drawn comb. You can NOT use foundation! You must develop methods of having bees make foundation into DRAWN COMB, and then protect it for the next 10 months. Drawn Comb is a beekeeper's most valuable possession!

To help foraging bees get in and back out of the supers in a hurry and without adding congestion to the brood chamber, I install 2 IMIRIE SHIMS (pictured in Brushy Mountain Catalog) and a top entrance cut in my inner cover to give the foraging bees 3 additional entrances to the standard bottom board entrance. (I hate holes in my super bodies and the Imirie Shim provides an entrance which foraging bees learn to use).

As the nectar flow begins to slow down, that means that the flow will be about 90-95% finished within a week. I remove at least one super of any empty or partially filled frames, leaving behind fully capped frames and those whose capping is not complete. By removing those empty and slightly filled frames near the end of the nectar flow, you force the bees to finish the capping and store any extra nectar down in the brood chamber. DON'T WAIT more than a week or so to harvest the capped honey before it gets all travel stained with the tracks of bees dirty feet. Get that honey extracted before July 4th, put all those extracted supers on one or two colonies for cleanup and drying of frames, and put just one super of partially filled frames on other colonies in case there is some minor flow in future. If there is none, these frames can be comb scratched and put over an inner cover in October and the bees will rob out those frames for winter stores. There is a valid old saying: Have EXCESS super space at nectar flow start and NOT ENOUGH super space at nectar flow end.

Anyone with a serious interest in judging the beginning and ending of a honey flow plus how strong it is (weight increase per day) should keep a colony permanently mounted on a platform scale, and the weight recorded after dark every night. Why guess, when you can find a platform feed scale at a farm auction for as cheap as \$25-\$50. Guessing is a very poor substitute for accuracy or losing a swarm.

Because of the necessity of treatment to kill both the tracheal mite and the varroa mite in WARM weather, NO LONGER can you keep supers on from spring nectar flow into the fall nectar flow. Hence get your spring or early summer honey harvested, treat your bees to kill mites, and then put supers back on for late summer nectar.

There is SO MUCH MORE DETAIL to Good Honey Production Management, but what I have said are the basics of good production technique. Obviously, your location, floral sources, and the weather will be different than the dates I have used above, but the basics are the SAME .

Optimizing Honey Sales

Everybody has heard of "One Stop Shopping", and that is why most people go to malls to do their purchasing. It is the same reason that many gasoline stations sell FOOD, ICE, DRINKS, NEWSPAPERS, even TOILET PAPER, but they don't fix tires any more.
CHANGING TIMES!

Your local food store sells honey, maybe Sue Bee; but does it sell orange blossom, Eucalyptus, Tulip Polar, or Basswood honeys? Does it sell Creamed Honey, Comb Honey, or Honey Sticks? Probably not. I am very sure that your grocery store does not have an OBSERVATION HIVE, Honey Gift Packages, or a beekeeper who answers all these questions that city people ask about bees. Hence, your grocery store is NOT one stop shopping for different honey, plus the honey is not local honey that hay fever sufferers want. The grocery store honey has been heated and filtered to retard crystallization, and it may even be Chinese Honey. Hence, grocery store honey is just a heavily filtered, heated, light amber clover honey for \$2.49/ pound.

Surely, what I have just said must give you some ideas. I will tell you what the best honey in the world is - can you guess - The best honey in the world has a label that reads BEE PARTNERS HONEY produced by George Imirie and Ann Harman. If you think your is as good or even better, why aren't you selling it for up to \$15/pound. Do you have Gift Packages, Comb Honey, Honey Stix, and an OBSERVATION HIVE? Aren't you proud of your product? Shame on you!

Unfortunately, as a group, beekeepers are not known to be good sales people - In fact many are introverts who almost believe "selling" is sinful or the art of circus barkers and used car salesmen. Can't you tell someone how the bees make honey, why there are different colors of honey and different taste? Do you know that most people under the age of 60 have to summon their courage and ask me " HOW do you eat comb honey? Or HOW do you get the honey out of that comb to put it on my hot biscuit?" The kids see the OBSERVATION HIVE and all want to find the MARKED QUEEN, then they want to show the queen to their father and mother who are the ones that HAVE THE MONEY. You would be surprised at how many crates of assorted honeys we sell in November and December and their price is about \$12-\$15 per pound of honey. We sell Cut Comb honey for \$1.00 + 25cents/ounce. Hence a 16 ounce pieces sells for #1.00 + 16 x 25 = \$5.00. We sell Honey Stix for 20cents each, 2 for 35, 3 for 50, or 7 for \$1.00, and our cost is just over nickel each. We sell primarily at county fairs and we average about \$100/hour in sales. Out total sales at the week long Montgomery County Fair is over \$1,000/day

Enough of that! Let me tell you what is important about this type of selling. Not only are you making some pin money for yourself, but you are explaining THE IMPORTANCE OF APIS MELLIFERA to the public maybe preventing them from casting a vote to outlaw bees in your town. You are aiding the commercial beekeepers by explaining the goodness of honey to humans, You are explaining the importance of honey bee pollination for 35% of the food we humans consume (The lawmakers can't do this, because they don't know about it themselves.) Why don't you help the bees who are helping you?

Don't ever try to compete with the grocery store price! You can offer so much more: more products, more knowledge, it is local (maybe right out of their garden), and **YOUR HONEY IS NATURE'S BEST HONEY** and tell them so!

I love to tell stories that people may not know because they aren't old enough. Back in the 30's, there wasn't much bottled honey around because jars cost too much and most people couldn't afford an extractor. With Dr. James I. Hambleton instructing me in beekeeping, I produced beautiful basswood comb honey sections. I sold them for 25 cents each, but my mother took the money and put it in the bank where it stayed forgotten until she gave it to me on my wedding day 55 years ago. In those days of nickel cokes, nickel telephone calls, 15 cents for a gallon of gas, a quart of milk was 8 cents. 25 cents for a 12 ounce square section of honey was a fortune, and putting that money in the bank instead of buying ice cream or candy was the training of my Scottish parents that taught me the value of a dollar. I was so fortunate!

Don't be satisfied with just **HAVING** bees. Be proud of being a fine **KEEPER** of bees. Your reward will be **THE JOYS OF BEEKEEPING!**