



B-PLUS

BEEKEEPING REPORT FROM MICHIGAN STATE UNIVERSITY

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TALES FROM THE LONESOME HIVE

Over the years the number of my personal hives has dwindled to the current "lonesome" hive. I plan on reporting on its trials and tribulations on a periodic basis. This is the first of the installments.

In early April the colony looked very good having come through the winter in excellent shape. I was concerned about too rapid a build up and possible swarming, so I reversed the brood chambers and put on more room. The spring honey flow moved almost directly to the main honey flow, which started earlier than usual, and so the extra room was good. The early nectar stopped the swarming instinct, or the stock is not too prone to swarm. I then put on the 3rd shallow super and was anticipating a great year. Then the drought! Which is still continuing for this area. I had 60 pounds of honey in the hive by 15 June, but this was all that we were to get. It was fortunate that we had the bees and room on early or I probably would have had to feed them to get through winter.

I am very impressed with the stock in this hive. It is one that I "selected" via the attrition of the other colonies that I once had. It has many of the characteristics that I wrote about in the last B-Plus. It doesn't have very good comb surface as the honey is usually "wet", (the bees do not put an air space under the cappings). Otherwise, the bees are gentle (good for a backyard) and are especially quiet on the combs. The latter trait is one that I particularly like since it makes it easier to examine and to find the queen. The production was not very good this year, but this colony was one of the better hives that I saw in this drought region.

The hive is now packing some goldenrod and aster honey into the two deep brood chambers, and one shallow super, which should get them through winter. I like to have the hive weigh about 150lbs. to be sure that there is enough food to get them through until spring.

I will put in the spacers that I use to raise the inner cover as soon as it gets a little colder. This 3/8" wedge allows excess moisture to escape and also gives the bees an upper entrance for winter. The entrance is under the lip of the telescoping cover so that the entrance is out of the wind. We will pick up their story next spring.

LEBKUCHEN - GERMAN GINGERBREAD COOKIES

This is my favorite cookie, that came to me through my wife, Barbara's family. I am a 6th generation American (German) so I don't have those traditions. The recipe is large (15 doz.) so you could cut the size down if you want. It does use a large amount of honey. I think they are great with coffee! These cookies are a standard at Christmas (and beyond for 15 doz.) at our house.

4 Cups Heated Honey (Cool)
3 1/2 Cups Brown Sugar
6 eggs
6 tsp Lemon Rind
6 Tbl Lemon Juice
3 tsp Baking Soda
6 tsp ea. Cinnamon, Ginger, Cloves
16 Cups (5#) flour
3 Cups Chopped Candied Fruit
3 Cups Nuts

Mix well and refrigerate overnight. Traditionally they are rolled out and cut into 2" X 3" rectangles. A nutmeat and/or piece of candied fruit is placed in the center. Baked at 350° for about 12 min. Do not overbake. Glaze with a powdered sugar and water mix. Best if stored for some period in a closed container. If they become hard they can be softened with a slice of apple in the container.

VARROA UPDATE

After a rather extensive survey of honey bee colonies throughout much of the state, the Pesticide, Plant Pest Management Division of the Michigan Department of Agriculture has found no more varroa mites. That is good for Michigan. Currently there are 17 or 18 states where at least some varroa mites have been found. Michigan is included, though the colonies where the original mites had been found have been eliminated. Some of these 18 states also had a small number of colonies that had mites and these colonies were eliminated. There are also some states where the numbers of colonies and mites are extensive. Michigan may have a little time yet before we have to consider using control measures. We will try to keep you posted as to the movement of the mites as they progress from state to state, since once you see very many varroa mites on your bees it may be too late to control them without having the colony suffer serious loss of bees and honey. Yet early treatment may only contaminate the hive, or possibly hasten the development of

resistance to the chemical by the mites. There is currently only one miticide that is labeled to control varroa, and thus we cannot afford to lose its effectiveness any earlier than necessary.

Since the varroa mites prefer to develop on drones, and since drones may drift a half mile or more from one hive to another, we can be sure that the mites will come to Michigan some day. Whenever the MDA bee inspectors find them, or they are in a nearby state, we will alert the bee-keeping community as best we can.

AFRICAN BEES AND YOUR BEEKEEPING FUTURE

Almost as assured as death and taxes, the African honey bees (AHB) will arrive in the U.S. sometime within the next 12 to 18 months. Those of you who have read much about these bees may have also recognized that I called them African and not "Africanized". There are a number of reasons for this name change. According to the experts that I have talked to in recent weeks, the evidence is that there has been almost no change in the genetics of this bee (at least at the moving front) from those in Africa. Therefore, there is nothing "ized" about them, they are the real thing. What happens is that the AHB queens leave the hive to mate very late in the afternoon when only AHB drones are out flying. There may be other factors at work but the end result is that the bees are not hybridizing with the European bees at all. You can produce hybrids by mating a European queen in an area with African bees. It appears that the daughter queens from this mating then mate with African drones and the process quickly reverts the strain to almost full African. The consequences for the southern part of the U.S. is very real, and for all of us in the north that wish to purchase queens from breeders in the south. There will undoubtedly be other problems when the African bees cross the Rio Grande, not the least which will be the fear among land owners where beekeepers have their apiaries.

The question now becomes what can we (beekeepers and apiculture researchers) do about the problem? I am quite convinced that the ultimate answer will be in selection of those characters that we desire within the African bees and the elimination of those that we do not want. Selection for gentleness has most surely occurred with our current strains of bees. Forty to sixty years ago many honey bee colonies were very mean, yet they are rare in most beekeeper's apiaries today. It will be necessary for the U.S. beekeepers to select for gentleness, or any other characteristic that they want in their bees. However, I have confidence that we can do just exactly that. The selection for gentle bees has proceeded to some extent in Brazil and I see no reason that it can not work here. It will take effort and some knowledge. Certainly, a strong help from universities and the USDA could hurry the program along. However, beekeepers control the vast majority of the gene pool and thus it will be necessary for them to shoulder a major share of the selection.

The most immediate problem that most beekeepers will have as soon as the AHB cross into the U.S. will be countering the bad press. Each one of you will have to be a spokesperson for all of beekeeping. You can assure people that beekeepers will be the most affected, and that most of the public will probably not even know that AHB are in the country, except for the reports in the press. The AHB should not reach this far north, though queen and package purchases as well as migratory beekeeping could change that picture, at least on a seasonal basis.

It might be time to consider moving or screening your apiary locations. Sometimes it may be only a minor move or shift that will make the bees fly in a different direction away from roads, walkways or houses. It also may be important for us to know the exact origin of our stock at all times. The best way to do this is to mark your queens. I use model toy enamel that you can buy in most hobby stores. It comes in a wide range of colors. Use the brightest hues of the various colors as they show up the best in the colony. There is a international 5-year color code that you can use if you wish. The colors are for year ending in:

- 0 or 5: blue
- 1 or 6: white
- 2 or 7: yellow
- 3 or 8: red
- 4 or 9: green

I paint the queen using a straightened paper clip. It is not too difficult to hold a queen to paint her thorax. If you are good (and fast) you may be able to paint a queen while she is on the comb. The paint should last her lifetime.