



B-PLUS

BEEKEEPING REPORT FROM MICHIGAN STATE UNIVERSITY

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TRACHEAL MITES POPULATION CRASHES?

It may be too early to decide if the whole state is similar to the colonies found nearby, but we have very few mites. We have looked at all our colonies and some from other beekeepers, and the percent of mites is probably less than one percent. This is true even if the colonies had mites last year and the colonies were not requeened. We put several new resistant queens into colonies. However, even those colonies that were not resistant before, or came from stock that did not claim resistance, have very few mites. So where did they go, or what happened? I don't know. I suspect that some biotic factor has reduced the number of mites. What that biotic factor is may be anyone's guess. It could be a disease has reduced the population of mites. It happens to insects and other arthropods so it would not be strange to have it happen to tracheal mites as well.

If you are curious about the status of tracheal mites in your colonies, send me some samples. We prefer the bees frozen, but they can also be sent in a jar with rubbing (isopropyl) alcohol. Label the jar(s) with colony or apiary numbers, and we will get back to you with the results...if we don't get thousands. Now if we could just have a disease happen tovarroa!

DIVISION SCREENS - A BEEKEEPING LESSON THAT TOOK A LONG TIME COMING

I have used all types of division screens over the last 45 years. Some with two screens or just one. I have even used two queen excluders together with good success. I now suspect that I was either very lucky or maybe not too objective when I looked at the results. Honey bees have a way of teaching you lessons every day! Maybe that is why I like to work with them. It keeps you always learning new things.

Last spring I made up some screens that had just one layer of 8-mesh hardware cloth stapled onto a half-inch wooden rim. They were to make divisions on the top of colonies. These divisions were to mate or introduce queens into the colonies. Needless to say, the reason that I am writing this is that many of these splits killed the queen. The queen that were killed could be on either side of the screen, that is the bees might just as likely kill the laying queen on the ~~but~~ of

the colony. I was not happy with the results. Since then I have modified the screens to put two layers of hardware cloth on the rims. Maybe next year I will not have so many queens lost on introduction.

There are probably several reasons that I was successful using single screens before. The most obvious reason is that when I had used single screens with good results was when they had been put on during a honey flow. I suspect that honey flows cover up many of our management sins. During a honey flow the older bees that tend to be the queen killers are out foraging, and thus occupied. From now on when I talk about division screens I will mean two layers of screen separated by some space.

Division screens used above a colony have some good attributes in that the nuc can be very small. The bees from below will provide heat to allow large amounts of brood to be raised in the nuc since they do not have to provide all of the heat. The disadvantage of divisions above a colony is that it is hard to move them to another stand within the apiary. They have a strong tendency to drift back to the original location. In the above story I was just using the division to establish a laying queen. Making the mating divisions above allows you to see if the queen is laying in a good pattern before you kill the old queen. In addition it is very easy to put this queen down into the lower broodnest. Even if I couldn't, or did not choose to, find the old queen. I have had good success uniting the nuc to the colony below as long as the queen below was older. Sometimes I have lost the nuc queen but in most cases I have then found a supersedure queen below. In those cases the differences in age between the two was not very great and the supersedure queen won the battle.

BEEKEEPING NEW YEAR

As I am writing this particular article just before the 1994 New Year, I have some thoughts about 1993 and then something about thbeekeeping new year.

1993 was not all that good to most beekeepers in the United States. While the honey harvest was not a disaster for Michigan it was not a "better order more barrels year." There may have been some exceptions, but most had a slightly less than average year. Then the action of congress to eliminate the deficiency payments for honey will have the effect of reducing net income about 10% next year. Unless the ITC makes a rule to limit Chinese honey, and President Clinton agrees, then imports could reduce the price of honey even more. And finally, varroa mites have made serious inroads in Michigan and have killed many colonies. Lets hope 1994 is better in all categories.

I suspect that the real "new year" for beekeepers starts with the first visit to the apiary in the spring. To some it might be the late winter feeding trip, but for me, it is the first time I can really open a colony and look at brood and a queen. I probably have previously taken up the dead colonies from winter and am now only looking at the season ahead. That is truly a New Year!

TALES FROM THE LONESOME HIVE

The past year was a very different one for me and the LH. I changed the way I have been producing honey. Maybe forever. I have written before that I was planning on switching over to the Half-comb cassettes for comb honey production. These cassettes were invented a few years ago by John Hogg of Galesburg, Michigan. I had decided to switch to comb honey production because of the Halfcomb boxes. I think they are about as nice a system for comb honey as exists. The cassettes make wonderful gifts. They are ingeniously designed for production, handling, and table serving. Then too, comb honey makes a wonderful way to introduce people to honey. With the current honey prices we may need to consider all methods of increasing sales and income. (In some ways we have come full circle with these clear comb-honey boxes. L. L. Langstroth's original hive had places on top for fruit jars. The bees were to put the honey directly into the inverted jars. I am not sure if he was successful in this aspect of his newly designed hive or not.)

During early 1992 the tracheal mites had reduced the Lonesome Hive's population so much that it could not produce any surplus honey. But this year was going to be different. So I set about my plans early. I had talked to John about comb honey production for the Lonesome Hive. He wanted me to add at least one more colony so I could then use his 3-for-2 split system. (He will discuss this system during ANR Week in March.) While I like most aspects of the system I had to disagree with him on using it. The whole concept of the Lonesome Hive would be destroyed if I added another colony. I wanted to produce comb honey on just **one** colony, and accepted the challenge of doing it.

Most of us started out in beekeeping producing comb honey for the first year or two. If for no other reason than we didn't have an extractor. However, comb honey production is not as easy as producing extracted honey. Comb honey works well with package bees and new comb foundation the first year. Many beginners then have trouble the next year and end up changing over to liquid honey production. From that point on we envy the beekeepers that can produce comb honey, or raise queens. It doesn't have to be so for either. Comb honey production does require some attention to detail, but is essentially having a large population in the colony, nectar coming into the hive, and no other space except the comb honey cassettes. Once the bees are producing comb and storing honey in the boxes it is just a matter of managing the supers until the flow is over.

My basic plan was to start the honey flow with a shallow extracting super on top of the broodnest. Then once the nectar was coming in strong to switch over to the Halfcomb cassettes. At the end of flow switch back to an extracting super if I didn't think the bees would fill another comb super. The system worked! I ended up with about 100 good cassette boxes out of the three supers that I put on the colony. (120 cassettes in the three supers.) It wasn't a perfect year for comb honey in this area as the nectar did not come in very fast, but the comb honey still looks very nice. I also produced about 40 pounds of extracted honey on the hive. Thus, I was very happy with the results. In this system it was just watching the honey flow to know when to put the supers onto the hive. However, the idea of getting a portion of the honey out of the middle of the flow seemed to work very well. For those of you that don't want to end up with 40 lbs. of liquid honey will have to time the addition a little better than I did, or else use a different scheme.

I scraped a few boxes, when needed, and put the covers on, and have been giving them away to friends ever since. It is fun to explain to the people how bees work in the boxes and the clear plastic lets them see the honey and comb very well. All of you beekeepers that feel that you have lost a little of the magic of beekeeping - try the Half-comb cassettes it will get you excited again!

POLLINATION - A GROWTH INDUSTRY?

(The following was taken from APIS, Dr. M. T. Sanford's Florida Newsletter.)

I have participated in two panels this year at beekeeper's meetings on commercial pollination. At least for some, it is a growth industry. For the first time this year, Florida bees were trucked to California for almond pollination!

Uniform advice from these panels was that a quality pollination service takes commitment. The beekeeper must always be ready to get bees in and move them out of fields with very short notice, and some kind of a backup plan should be in place in the very real case that things go wrong. One must develop a long-term personal relationship based on trust with the customer. A key to this is communication. Successful pollinators are regularly in contact with customers, even during the off season. They send out reminders and make phone calls in advance of the coming season to try to assess their capabilities and the grower's needs. One outfit writes a newsletter that includes information on a wide variety of topics.

The message from participants on both panels was clear. Given quality service, growers are not opposed to paying top dollar for pollination fees. There seems to be no better time than now for every beekeeper to look closely at commercial pollination as an alternative enterprise.

Not everyone can, or should, be a provider of bees for pollination. However, every beekeeper should be a greater advocate of planned pollination. The image of beekeeping as just a drain on the U.S. Government's budget must be changed. (I am aware that the image is wrong, but there is still the image that must be changed.) A very clear to help change the image is to stress the importance of honey bees to fruit, vegetables and seed production. Both to us and to wildlife. Learn all you can about the fruit-set needs and pollination of crops. The life of the beekeeping industry could be in the balance. It needs your support in every way possible.