2026 Stahlman Bee Notes

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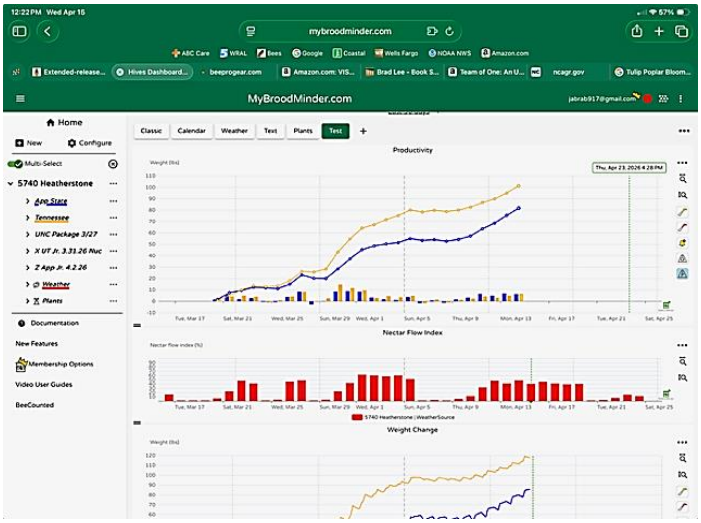
May is an exciting month to keep bees



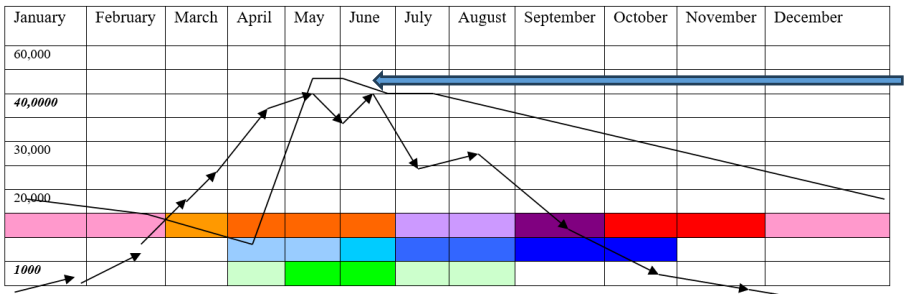
I appreciate the feedback I received from the last issue. **Randy Bowling** sent me this interesting report from Broodminder of what his hive scales indicated of bee activity from March thru April.

Data like this is invaluable for a beekeeper to see first hand what bee colonies are doing. He wrote, "I had two hives survive winter and both started ramping up bee population in February off the maple bloom." He shared this report and I found it very interesting. One colony's data is reported by a yellow line and the other by a blue line. The chart also indicates weight gains from February thru April. Weight is added by the addition of brood, bees, nectar plus pollen. Temperatures within the hive is also recorded and variations in temperatures can be noted.

Ken Benway wrote to share some comments about what a bee chapter should consider for its members. I am glad that the picture of the 5 County Bee Apiary got some attention.

Jim Blye reminded me of the lack of rain we are having in N.C. All of this helps me understand there are many topics to discuss in a newsletter.

The Broodminder chart really points out the rapid increase in colony weight from winter to now. Many years ago, I put together some information for a class I was teaching on honey bees. This is a chart I created for that class to show the population cycles of the honey bee.



Note that **bee populations reach a peak during May, June, and July.** Weather conditions can have an influence on population growth but for the most part,

spring is short compared to the rest of the bee season. Brood is produced largely during the period shown by the arrow line. The goal of most beekeepers is to get some honey from their bees.

Thus, a large population of honey bees is required for honey collection. Bee populations in May, June, and July hinge on the success or failure of a colony of bees. A colony with a poor bee population during this period will just exist – It will have a bee population that is struggling to live.

In fact, there are many signs a beekeeper can see – From the first day a colony is inspected, a count of brood frames should be noted. If a colony lacks brood, has spotty brood patterns, or declining egg production, the hive may need a new queen. We are talking early spring (April and May). Check for the reason (lack of bee population) - something like mites or poisoning from a pesticide and possibly the queen.

This is an over wintered colony. A feeder is providing food for the colony. In January this might be okay but by May, this colony is weak and unproductive. Why? It takes bees to make honey!

Weak hives face many issues which stronger colonies do not!

- Newly started colonies are in the **weak hive category**. They require feeding and time to build into strong colonies. A queen might be able to lay 2,000 eggs a day, but if its nurse bee population is small, they can only feed a limited number of larvae. From The Hive and the Honey Bee 2018 printing, published by Dadant, page 286 [Researchers report that approximately **3,000** nurse bee visits are made to each cell during the development of each larva!] Thus, if the queen is a good laying queen, it will still take time to produce a large bee population feeding larva which is based on the nurse bees available in the colony.

The best way to learn about bee population cycles is to do an experiment if you have several strong hives. Just the other day, I made two splits from two colonies. In one situation I moved frames of brood (three frames) added one frame of foundation and one frame of honey stores. I made sure eggs were present and the old colony was moved with its queen to another location. The split occupied the old hive location.

The second split was handled in the same manner with this difference. I introduced a new queen to the split. I am in the process of comparing the difference between the two methods. Both equal splits on the same day except one will raise an emergency queen which will require a brood break of approximately four weeks. The other split will have a very short brood break – less than a week.

What I expect to see:

- The three frames of brood will provide each new colony with a number of new bees.
- The split with a new queen will have a short brood break of less than a week. Thus, that queen will begin laying eggs and begin to build a bee population of her own. Over the next three weeks, she may potentially lay 21,500 eggs. That is much more than could be added by a package of bees of approximately (12,000). Many of the bees in the split will be young bees – the bees needed to care for larva. The split will also contain the field bees returning with pollen and nectar. Field bees always return to the location of the old colony. This new split will be productive in a short period of time – maybe four weeks to gather a honey crop.
- The split that will have to raise a new queen will have a long brood break.
- A fact – First, the bees must find a young larva (several of them) and begin feeding them to become queens. (A period of 12 days or so). Queen development takes 16 days but the bees start with a larva that is already 4 days old. Virgin queens emerge and the surviving queen must take a mating flight and when mated a week will pass before egg laying begins. The brood break is three weeks.
- By this time the split will have a **maximum bee population** of all the brood that emerges from the original three frames and the live bee population at the time of the original split. Without eggs being laid, there is no replacement for the bees that die and thus the bee population will decline. Result: I would expect the split [raising a **new queen**] to take approximately 8 weeks to reach the same level of bee population the split with the queen took.
- The split with the queen will gather a honey crop while the split raising a new queen will often be ready after the honey flow has finished.

What does the loss of missing a honey flow cost the beekeeper? If the loss of honey being sold at $10.00 a pound is considered, the cost of a new queen costing $40.00 is a bargain. The reality of beekeeping for new beekeepers is getting a honey flow is not likely when bees are

installed in hives in April or later. This of course, depends on the honey flows available to the bees. I have seen late honey flows in Ohio where goldenrod and aster flows are common. Here in North Carolina with a drought going into summer, even our normal honey flows are at risk. Honey flows are over by July here where I keep my bees.

This chart shows population growth I expect from my two splits.