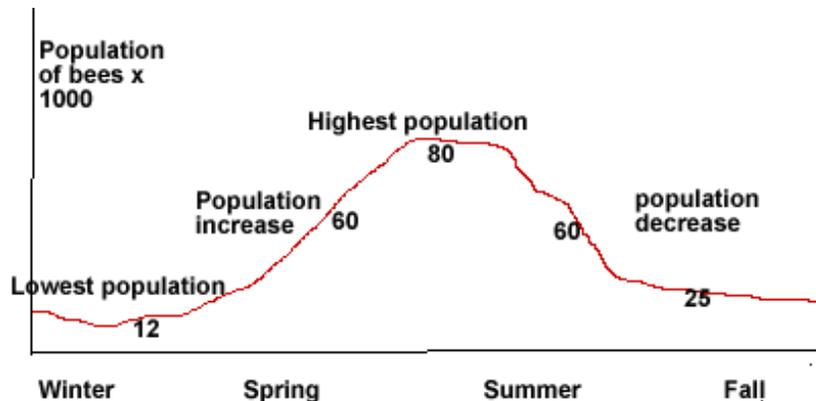


Stahlman beekeeping notes for 2021

Issue # 38



If we look back to Issue # 26, I wrote, "Thus, if we look at the life cycle of the honey bee we will notice that brood-rearing slows or ends completely by late summer and fall. Some races of honey bees in the United States such as Italian bees are very broody – which means the bees will continue

to raise a large number of bees even when stores are low. The bees that survive generally will reduce brood rearing as food sources become unavailable. The bees depend upon stored honey in the summer just as they do when the winter season begins."

It makes no difference where you keep bees. Long winters can be handled by honey bees even at -50 below zero and short winter seasons such as exist here in Raleigh which allows honey bees to fly more often during the winter –allowing the bees to consume more honey stores. Beekeeping technique has to be adjusted accordingly by those who manage (keep) a hive of bees.

One can observe a lot about their honey bees by opening a hive and doing a quick check. It really doesn't take much time to size up a hive of bees but it must be done.

- It is not necessary to see the queen. That takes time!
- Do you see drones in the hive?
- Do you see honey being stored in the hive?
- Do you see eggs, larva, and capped brood?

I often visit bee hives of friends and students. I observe a number of things that they do not see.

- Eggs are hard to see. A tip: Take a magnifying glass to the bee yard with you. Hold a frame up so no shadow obstructs the bottom of cells. Carefully look for young larva and eggs just at the edges of capped brood.

- Two conditions generally can be observed at this time of the year.
 - 1) Bee populations – hives are either very strong or they show signs of decline.
 - 2) Hive beetles or Varroa mite populations are growing stronger.

Hives that are strong generally have: good nectar and pollen resources, a good queen, and ample room for surplus honey storage.

Hives that are weak generally have:

1. A weak queen (I think this is the number one issue with weak hives.)
2. Lack proper foraging opportunities.
3. Have disease problems.
4. Lack of good management by the beekeeper! (In my opinion the second major issue with a hive's survival).

Let me share a good example of not inspecting a hive of bees on a regular basis:

I follow a number of posts on beekeeping sites: New beekeepers especially post items and ask questions. Bee schools come no-where near to being the complete answers to what it takes to become a beekeeper. Getting into beekeeping is easy – no certification requirements. In fact, some bee suppliers will sell equipment to beginning beekeepers without a concern for their success. The failure rate for those beginning to keep bees is high.

This is a picture I took from a FB post:

It took some time for the wax moths destroying this hive to develop. It is a great example of what wax moths can do to a hive.



Had this hive been inspected earlier when it had bees, this problem could have been avoided. As it is, this hive is no longer of much value. The frames and wooden ware may be salvageable but the comb is destroyed.

To keep bees requires attention, effort and time!

The frames indicate that at one time this hive had a good population of bees because the foundation in the frames was completely drawn out and not that long ago. Note the age of the frames shown (pretty new). This hive died out during mid-summer!

Bee schools should be longer than a day or two. Many are one day affairs covering just the basics. Class sizes should be small – allowing the student to interact with the instructor. Bee clubs/associations can provide mentoring services for hands-on-experiences in a club bee yard. Schools affiliated with State Beekeeping Associations provide additional benefits to students.

Is this the best time to start beekeeping? Those who have some wisdom will wait! Those wanting to become beekeepers have all winter to read bee books and visit web sites. Package bees and nucs are usually not available until spring.

Early this year one of the individuals I mentor had issues over worms in their hives. We can find roaches, ants, and other bugs in a hive of bees. I have put together small vials of alcohol with examples of things to look for in hives.

Wax Moth Larvae



Small Hive Beetle Larvae



New beekeepers need to know what to look for – most schools will talk about problems in a bee hive but so many people are getting into beekeeping without the background, or knowledge to succeed. Taking a bee school is a basic step into beekeeping but it does not solve problems new students will encounter as they keep bees. Any bee school offering instruction only on spring start up is doing a disservice to its students. Beekeeping includes bee management techniques for summer, fall and winter.

Any hive of bees being managed must have frequent inspections! Now is the last chance a beekeeper has to save a hive before winter sets In.

It is not the time to buy a hive of bees! I would guess that a hive has a 50/50 chance of survival till spring if being bought now. The same goes for making a split at this time of year.

Over the next few issues, I will share thoughts on saving a hive in trouble. Strong hives for the most part still require mite treatment and some inspections just to make sure hive

populations will be large enough to support the early egg laying by the queen in late December or January. Remember it takes a bee population to maintain a brood nest temperature of 92 °F. A hand full of live bees can not do that in January.

Let's start with Food. It has been quite a year in many parts of the U.S. Some areas have too much water and then others have no water at all. It has been dry here in Raleigh with 90°F. days one after another. An occasional rain helps a bit but most of my grass has died. I am watering my garden and house plants daily.

These conditions set up an unusual honey bee activity with serious consequences for any hive unable to defend itself. And feeding a weak hive may be asking for serious trouble.

If your bees have not experienced robbing, it is most likely because:

- You have a very strong hives of bees – they may be the robbers.
- You have been feeding your bees so they do not become robbers.
- Your bees are in a location with flower resources abundant enough to provide for the hive's nutritional needs.

It is rather easy to determine if hives are in dire need of food. Set a small pan in an open area and put a cup of sugar in it. Pour a little water over the sugar – it is not necessary to put so much water in the pan that bees will gather and drown. Hungry bees will find your pan of sugar quickly. During spring, food sources are very abundant but in late summer the situation is reversed.

The cycle of life on this planet determines how individual species survive. In nature the strongest most powerful will have the best chance of survival. The weak unfortunately do not.

Honey bees need care just like a cat or dog. I have been feeding a flock of birds two 40 lb. bags of bird feed a month in the two feeder stations I have. I notice that the variety of birds change with the season. Some are here all the time and others show up and then leave.

I have a friend that spent over \$1,000.00 on a vet bill for a dog this year. He had a hive of bees with problems. I asked how much he would pay for a bee doctor to visit his hive? He thought I was the bee doctor who would work for free. After all, the dog was a member of the family. Honey bees just don't get considered as members of the family.

Most of us consider a bee hive as a box full of wild insects. It is more complex than that! The insect (the honey bee) is unique. It produces "things" we as humans use! They are not mosquitoes, wasps, hornets or yellow jackets. Thus, we have seen over the last 20 years a movement called "Save the Bees."

The commercial beekeeping business in the United States is in decline – who can make a living selling honey for \$2.36 a pound? The number of hobby beekeepers has increased

tremendously. Some are selling their honey for as much as \$1.00 an ounce! Many are unsuccessful keeping a hive alive but for a short time! Some areas are so over populated with beekeepers that a hive that produces 30 pounds of honey is considered good.

Colony losses in the United States are reported for each year. Most figures report 30- 50% losses while some beekeepers lose 100%. Already, the Wake County Facebook pages have postings of complete loss.

We are moving into the season that will determine if we have bees in the spring or not. Time is critical. Time does not stand still. Each day that some important management issue is not done – time is lost. That day is gone. **As I write this, there are only 109 days until Christmas!**

If we consider the brood cycle of a honey bee to be 21 days, that means a queen laying eggs will have only 5 brood cycles left in this year. If a hive is short of bees because of the laying pattern of the queen, that hive is in real trouble.

Some bee population points:

The egg laying of a queen honey bee will continue to decline toward winter. Weather will play a very important role in determining what goes on inside a bee hive. Weather has been warm or warmer than normal all across the U.S. Winters are unpredictable! Honey bees depend on fall flowering plants to store enough food for winter.

The population in a bee hive will be reduced each and every day new brood is not added to the bee population. Bee population loss is natural and is to be expected.

Many of the bees currently in the hive will be dead by Christmas time – the average life of a honey bee-- 40 days or so.



Young bees being raised at this time must be healthy. Body fat is especially important. Some of these bees will survive into February before they die.

Honey bees do not hibernate. They must have food available at all times. It is important that a hive provide a cluster of honey bees to keep a brood nest warm. Only the egg laying ability of the queen can produce the eggs necessary for a hive to survive.

Next week the topic will be sizing up a weak hive, its queen and choices the beekeeper faces in managing that hive for winter survival.