

STAHLMAN BEEKEEPING

NOTES FOR 2023

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I have always heard the term “young bees go to town” in the spring. This is the major reason we start new hives in the spring – not fall.

Management of an over wintered hive frequently requires visits to the hive on those days when weather permits. Especially here in the south. As I write material for this issue, I am dealing with a change of weather this week.

During what has been a mild winter – this weeks weather indicate a 20 degree below normal temperature forecast. For my beekeeping friends in the north, cold icy weather can shut us down fast. Fortunately it last for a short time. I am looking at high and low temperatures for Saturday as this newsletter goes out! My friends in Auburn, N.Y. have a forecast of low of -5°F and a high of 22°F and breezy. Ohio forecast is a bit warmer (Brecksville near Cleveland has a low of 9°F and a high of 23°). That is winter. On the other hand, Raleigh weather forecast is a low of 20° and a high of 38° That is more like a cold spring day.

Keep in mind as you read my notes that where you live makes a big difference in how you manage your bees. Reading these notes can give you spring fever!

It is still winter and spring is just around the corner.

Late winter in the South can look like March or April in the north. The following tasks are just suggestions to prepare yourself for spring like weather when it comes.

- **Traditional early year tasks include:**
 - Feeding
 - Requeening
 - Combining hives
 - Making splits
 - Comb management
- **No two hives are going to be the same!**
 - All hives need to be inspected for queen issues
 - All hives need to be inspected for diseases and pests.
 - All equipment needs to be evaluated.
 - New techniques and skills can be explored

Winter brood rearing has been well underway here in North Carolina. In Ohio I expected to see some small brood patterns by the First of February.

It has been a common practice to feed bees in the spring. It is important to feed a hive light on honey stores. But adding food to a hive encourages brood production. There are several reasons to be feeding a hive:

IMPORTANT POINTS

It will not be long before bee packages are delivered to beekeepers.

Have you ever asked the question “How many bees are in the bee packages I buy?”

Work done in 1939 by the U.S Bee Culture Laboratory under the direction of J.I. Hambleton took on the task.

Using samples taken from packages gave the following results.

In Technical Bulletin 309 we find: The average weight samples from 45 packages was 135.85 milligrams per bee or 3337 bees per pound.

A general figure used is about 3500 bees per pound.

It would be interesting for someone to do a similar test of our bees today. Has any shift in the weight of honey bees today occurred compared to the weights used in 1939?

A quote by Josh Billings

“What’s the use of knowin’ so much, when so much you know ain’t so!”

We are certainly in the age of science. There is so much information available and still the internet is full of many so called expert opinions – not facts.

- Keep a hive alive. In this case, one is preventing the death of a hive.
- Encourage brood production. This may result in early swarming or may allow one to make increases, sell surplus bees or extra bees to be used to equalize hives. Many beekeepers will move frames of bees to weak hives.

For me, the extra large number of early spring bees is profitable. I sold my swarms before the bees swarmed. I used the extra bees to build up queen mating nucs and I made splits of strong hives to replace my winter losses.

Some beekeepers may not desire to sell bees or increase hive numbers. If that is the case, I don't see a reason to feed if it is not necessary.

I have heard it said that it takes, "One frame of honey to produce one frame of brood." Vic Thompson, the lab tech at The Ohio State University, indicated it took one frame of pollen and honey to produce a frame of good well developed worker bees. Over population of a colony of bees is taken care of by the bees. It is called swarming – this reduces the population in the colony and reduces it's chance to store surplus honey.

Just 30 days ago, I took pictures of my hives. Bees were foraging for pollen during December and early January. Many bees were returning to the hive with pollen on their legs.

Frames looked like this:



This was a sample frame pulled from a hive on January 3, 2023. Bees are clustered near the center of the frame trying to keep capped brood warm.

A good look at this frame shows capped brood, a cluster of bees and stored honey. I estimated the hive had at least 3 to 4 pounds of bees clustered in the deep brood chamber and this upper medium super.

A strong hive like this has 4 or 5 frames of bees and brood in the bottom brood chamber and some brood on 3 or 4 frames in the medium above.

Winter bees convert honey into bees as temperatures warm.

It doesn't make any difference where you live - when bees become broody they consume a lot of honey and pollen.

A MAJOR REASON FOR SPRING LOSS OF STRONG HIVES IS THIS:

STARVATION



This is what I was looking at on January 23rd.

These medium frames were full of honey when I inspected them in November.

Look at them now!

How does one stop this rapid build up?

Honey bees are a creature of nature. If pollen is available and the weather permits, bees will raise brood! In fact they will consume

all food available. And when they have these large populations of bees, they die when they run out of food.



This is what beekeeping is all about!!!!

This is not a disease or mite issue. As I inspect my bees I see them fill far more open cells with pollen than nectar during this time of the year.

Those individuals using hive scales can determine weight gains and losses. If frames are filled with pollen as honey stores are used up, a hive can find itself in a serious situation if the beekeeper assumes that a hives weight is an indicator of when to feed.

Now is the time to know what the food supply is in a hive. One can not tell what is going on by

looking at the hive! Hives need to be examined just as soon as weather permits.

Winter bees in the north do not consume as much winter stores as bees in the south. Winter bees in the south are active because there are more opportunities to fly from the hive-- trees bloom earlier, noon temperatures are warmer and daylight hours are longer.

As beekeepers we are faced with many decisions. Late winter beekeeping is more challenging than any other in my opinion because we can do things. One can do nothing! Just let the bees do whatever it is that they do. Or we can be active and responsible for saving bees.

Why is beekeeping an art?

Honeybees do not read this newsletter, books or watch Utube. If one understands the biology of the honey bee, one is closer to understanding the art of beekeeping. The honeybees as we know has been around a lot longer than the human race.

Observation of what bees are doing is the magical key to being an artist in the world of beekeeping.

In physics there is a law of reaction and this is it: **The law of action-reaction (Newton's third law) explains the nature of the forces between the two interacting objects. According to the law, the force exerted by object 1 upon object 2 is equal in magnitude and opposite in direction to the force exerted by object 2 upon object 1.**

Human vs. the bee

We have moved them from a natural nest to a box and provided frames for them to build their comb.

If you think they will do what you want – guess again. The beekeeper must consider what the reaction of the bees will be to any management technique.

Many commercial beekeepers will be moving a bunch of bees into a cage containing a can of syrup. You can read all you want about the best means to hive them. Have you ever considered the bees reaction to what you are doing? Why is it that some will leave regardless of what you do? Will they accept the queen given to them? What can you do about that?

The very best bee school cannot cover the subject of how to keep bees. However, anyone wanting to keep bees would be lost without a bee school! Keeping bees require a person to open a hive and observe what bees are doing! The bees will not be asking for your guidance and help to do what they do! They will react to what you do (The force exerted by Object 1 [you] upon Object 2 [the bee] is equal in magnitude and opposite in direction to the force exerted by [the bee] upon [you].

Just one example: Lets just say you decide **to** (force) the bees to build natural comb on frames you put into a hive box. Who is really in charge here? The bees build comb. They have laws and preferences on how to do it. We have learned how to guide them but they still “will do it their way.”

This is something one might find in a hive of overwintered bees. The bees in this hive died.



The bees built comb on sheets of plastic foundation. They stored pollen - a lot of it - on quite a few frames.

The beekeeper that owned this hive told me he did not feed because the hive was heavy. Honeybees store both pollen and honey. This hive was rich in pollen stores but poor in

honey reserves going into winter. The beekeeper harvested proudly three gallons of honey from this hive. He said, “it was the best hive he had!” This is an example of **“The law of action-reaction.”**