

**Stahlman Beekeeping  
Notes for 2022  
Weather is changing!**



**Issue 46 – November 12, 2022**

## **The leaves are falling – Weak hives are at the risk of dying!**

It gets a little difficult for me to write about bee management in November. Finding topics during the bee season is easy but when my bees are put away for winter, I usually can find topics in books written about bees and some of the many associated topics such as candle making. Our weather has been warm for the most part this fall and getting into hives has been possible.

I visited with two old friends in Ohio, Helen & Spirt who have been keeping bees for many years. It is good to talk old times! The subject of small hive beetles came up. I was asked if we had problems with them in North Carolina! I remember saying if you have bees in North Carolina, you have small hive beetles as well.

The best defense against them is frequent hive inspections and hives with strong bee populations. Small weak hives don't have a chance! I have seen what happens when beekeepers try to make up weak splits.

Two of the new beekeepers I mentored this year experienced how fast a weak hive can be taken over. They both shared with me the opportunity to help them and increase their hive numbers. Once the small hive larvae are found in a hive, action needs to be taken quickly. That situation requires more than adult beetle traps.

I have spent much of this year writing about keeping hives strong. Small hive beetles usually slime up a hive and bees find it impossible to continue staying in the hive. The bees leave or in some cases find a small area in the hive to cluster only to die. This process takes time to develop but once larvae start working on a frame the time line to destruction is fast.

Some beetle facts again:

- 1) Adult hive beetles can live up to 6 months.
- 2) Female beetles lay masses of eggs in cracks or crevices in hives, often developing as a mass in cells close to pollen and brood.
- 3) Eggs hatch in 2-3 days and grow quickly.

- 4) They feed on pollen and honey and leave a path of destruction that damages the comb.
- 5) Small hive beetle larvae leave the hive to pupate. They burrow into the soil near the hive during the pupation period of 3 to 4 weeks.
- 6) The newly emerged adults seek out hives and the female mates and begins laying eggs.
- 7) Beetles can fly and spread which accounts for them surviving in new locations over winter. Setting slimed out frames with SHB larva on the ground for other bees to rob the honey left in the frames is a “real bad idea!”

In warmer climates, small hive beetles can be active year around. In colder climates, they remain close to the bee cluster but do survive with the bees. They can cause serious damage to stored honey supers.

Honey in slimed frames is unfit for human consumption. Bees often refuse to gather slimed honey from hives destroyed by small hive beetles.

I took the following photos this summer of a hive slimed up by small hive beetles.



This picture shows drawn comb on plastic foundation from a hive with new equipment. How does one go about salvaging a mess like this. By the way, the comb has a glossy wet look making it impossible to reuse because bees abandon frames like this. Also, if you look closely, the webbing of wax moth

is just beginning.

A beekeeper can use a hive tool to remove all comb from plastic foundation. The frames can be power washed and cleaned up. A little bit of bleach and a good scrubbing can return the frame and foundation to a usable condition.

Natural beeswax foundation can be cut out of the frame to recover wax. The only thing the beekeeper can save is the frame.



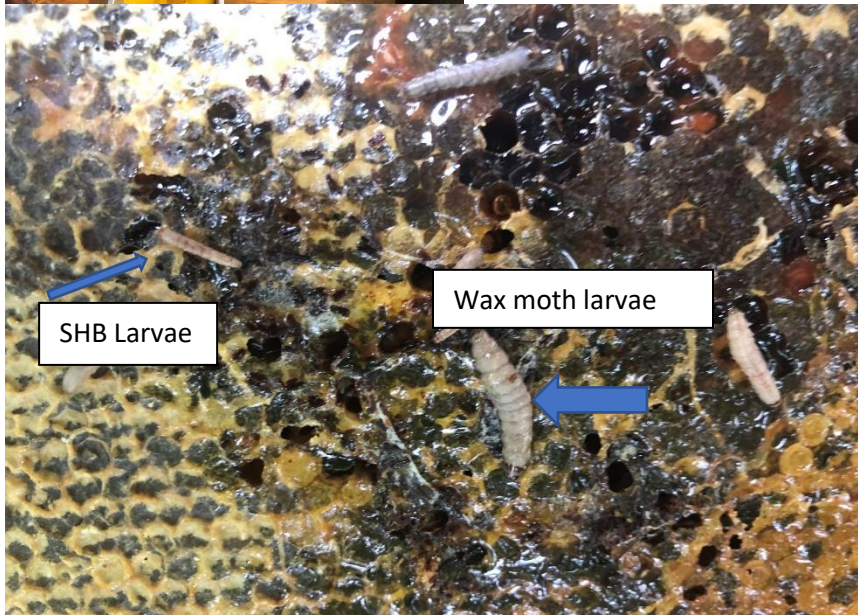
Yes, the wax is recoverable. The honey is not.

Honey is corrupted with larva and slime as shown below. Even robbing bees were not interested in it.



Wax comb can be dumped into a solar wax melter and a bit of beeswax can be recovered when sun rays allow it to work. Otherwise, it can be rendered by heating in water heated above the boiling point of wax (147 °F).

If the frames had been old and the comb dark, the best action might have been to put the frames into a burn barrel and burn the lot! It is important to make sure the larvae do not get a chance to reproduce in the soil around the hive or any place else! Small hive beetles have wings and can fly!



Wax moth will also be found on frames with the small hive beetle larva. Both are insects of opportunity. A weak hive is a sitting duck for them. This is a photo of both wax moth and small hive beetles working on a frame. If in doubt about the size of wax moth larva and small hive beetle

larva, the comparison is easy to see here.

Normally beekeepers are dealing with feeding bees to build up winter stores. What does a beekeeper do with a weak hive now?

Weak hives can be combined with strong hives. Usually this leaves the beekeeper with the dilemma of what to do with the extra queen.

I am going to suggest several solutions to the problem:

One is to set the weaker hive above a strong hive using a double screened board to allow heat from the strong hive to reach the weak hive above. Both hives would need adequate honey stores. The weaker hive should still have a fair population of bees. The reason for the double screen is to prevent the queens from touching or reaching each other. The common inner cover with wire screen above and below the hole will serve the purpose well.

A weak hive with several frames of bees could also be combined with a hive needing more bees. In that case, one of the queens needs to be removed – either offered to other beekeepers in need or killed. A queen removed from a hive usually will survive in a queen cage for several weeks. She will need attendant bees to care for her during the period she is confined.

The issue: What can a beekeeper do with a hive with so few bees? The queen and her bees



will not survive the winter.

The photo on the right shows exactly what happens to a cluster of bees that die because they could not endure cold temperatures.



I often use C.C. Miller as my guide for managing honey bees. Beekeeping literature from the beginning of modern beekeeping history supports the idea that it is better to make hives stronger – not weaker as winter approaches. Taking a frame of brood weakens a stronger hive and as many beekeepers have discovered, moving bees and brood in cold weather results in chilled brood because the number of bees needed to keep the cluster warm (92° F) is not adequate.

The logical answer is “take your losses now!” Hives short of honey stores can be saved. Hives short of bee populations are at risk! Trying to save a weak hive is noble! A diseased weak hive combined with a strong hive is not a good idea. There are management techniques to over winter bees – but a colony of bees is a living organism much like a human. All living creatures are subject to disease, genetics, and a stroke of luck and sometimes the best effort is just not good enough.

**I might mention that I receive some very good feedback from my readers.**

“We finally got done extracting about 2 weeks ago. A very good and big crop of honey. Last year we got 14 drums - this year 34 drums. Everyone around us had a great year also. Now gathering up the hives and getting ready to head for California around the 20th of this month.

Duane Rekeweg Thanks Duane for staying in touch! Duane is an old friend from eastern Indiana. I would like to get back to visit you at the “Back Forty” sometime soon.

Also Yric for your comments about Apis cerana.

A lot of research is being carried out around the world on other species of honey bees who have developed some resistance to Varroa mites and viruses. This is one reason beekeepers should be reading the beekeeping magazines: The American Bee Journal and Bee Culture Magazine that carry articles dealing with research results.

And to John Flemming especially for your continued support for beekeeping topics.

To all that write, I appreciate the comments and ideas you send along to me.