

2026 Stahlman Bee Notes

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It has finally hit me that beekeeping has really changed from the days of past.

I am having trouble understanding some material in new books and magazines. I was reading a piece under ***"The Classroom"*** by Jamie Ellis published in the American Bee Journal for February. It was about an 84-year-old who wrote "I do not feel like I can count on another 20 or so years to acquire practical experience to become a veteran beekeeper!"

I am a veteran beekeeper and I feel the same. AI is certainly becoming something I don't understand with data gathering possibilities. Phone apps are available – I hate usernames and passwords by the way. Just give me a book – something I can put in front of me to read. All these app's seem to take for granted I have a phone to take photos -- the app can use pictures to tell me what is happening in the hive. It seems like I need to consider my own behavioral anomaly which has become a "neurosis." One article mentioned "advanced mathematical models". Let me say I didn't do so well with math in high school or college. And when I read "alternative treatments" for varroa mites, I look back 30 years and I think we have been using alternative treatments each and every year. It is hard to keep up with what is new in beekeeping.



Let me begin June with some timely things one should consider:

- It is getting hotter and honey bees react to the hot weather much like you and I do. Drinking a lot of water keeps us hydrated. Think about your bees located where the sun beats down on their hive top cover. This is an early morning photo I took of bees already fanning at the hive entrance. I like this photo because it shows clearly the bees trying to cool the

interior of their hive. These bees are providing ventilation in the hive by circulating air into and out of the hive. You may also note bees collecting outside the hive. The bees move outside to clear the crowded conditions blocking air movement within the hive.



My bee hives

- Available water is important. I put a small water fountain in my garden which is a short distance from my bee hives. Small wood boards float on the water to keep bees from drowning. One tip, I use a little bleach in my water and it seems to help keep the water clean and the bees seem to like it.

I like cheap solutions to help my bees a bit in hot weather. Nothing fancy – scrap wood and some insulating paneling do a good job of providing shade at the hive entrance. I often use old pallets as hive stands and lumber is salvaged from time to time.



Insulation board cut to fit the top cover.

The front porch is used to reduce heat at the hive entrance. Any material might be considered such as insulation sheets. Note in these pictures that I use insulation boards to cover the metal top covers. Have you tried to touch the top cover of your hives on a hot day, or pick up your hive tool that has been sitting in the sun?

This is another photo showing a single deep hive with a porch made out of insulated sheeting. It

is put together with duct tape and cut to size with a knife. This one took me less than a few minutes to make. Duct tape holds it to the hive. This hive has the entrance reduced to prevent robbing -- another thing that one needs to be aware of when honey flows end.

There are several other methods used to help bees in hot weather.



- Screened bottom boards

Great Ventilation: a screened bottom board provides airflow to adequately ventilate the hive and keep the bees cool and are recommend for use in hot climates or during warm summer months. They can be home built such as the one pictured or purchased. They can be used in the winter as well if a protective sheet/material closes off cold winds to reduce stress on the bees. The screen allows debris and dead bees to fall through, keeping the hive cleaner and contributing to hive health.



- Screened inner covers/moving screens



Screened inner covers are designed to enhance airflow within a beehive, keeping the colony cooler during warm months and reducing moisture buildup. They allow for ventilation during hive transport, preventing overheating and stress on the bees. The wire mesh is fine enough to prevent other bees from entering the hive. I might mention that when moving bees during hot weather, closing up entrances during the move will most likely kill the bees confined in the hive. This

could also be called a moving screen.



- Slatted Rack These were introduced by C.C. Miller and he used them to provide space between the bottom board and frames in the brood chamber to allow bees to gather and not cluster outside the hive. Bearding is caused by bees opening up the space for air to circulate which results in bees leaving the inside of the hive and gathering on the front of the hive or below the hive stand.

Another technique used by some beekeepers is to place washers on the four corners of the inner cover to provide a space between the top cover and inner cover. The space created does not allow other bees to enter the hive. Hot air rises and this space is just enough to allow hot air to move up and out of the hive.

Small Hive Beetle Watch



Small Hive Beetle Larva on the surface of capped honey.



Adult Small Hive Beetles

If you are asking what you are seeing here, let me say, one must be on the look-out for these little worms and bugs ready to 'slime out' your hive.

The larval stage of the SHB life cycle burrow into combs, eating brood , honey and pollen. Unlike some other honey bee pest species, Small Hive Beetles are attracted to hives because pollen and honey are available. Feeding larvae are known to carry a yeast species (*Kodamaea ohmeri*) which causes honey to ferment. The rapid population growth of small hive beetles can cause a colony to die or abscond resulting in unusable frames.

The best defense against this pest is good strong colonies of bees. If observed, act immediately to prevent further population growth of the beetles. Smashing beetles with a hive tool is not going to do much to help the bees.

I have used two methods to reduce SHB damage and there are other methods listed on various bee web posts. I am going to stick with what I know and do. **Controlling hive beetles is important.** They move about on frames, gather on inner covers, and generally are hard to grasp because they are small and have a slippery exoskeleton. The larva stage does the most damage and the goal is to stop the beetles before larvae are observed on frames.



I have used something called beetle jails to trap as many SHB as possible. Beetle traps by what-ever name work over a period of time. Beetles hide in spots bees can not get to them and I have

found that traps placed between frames work and need to be checked often.

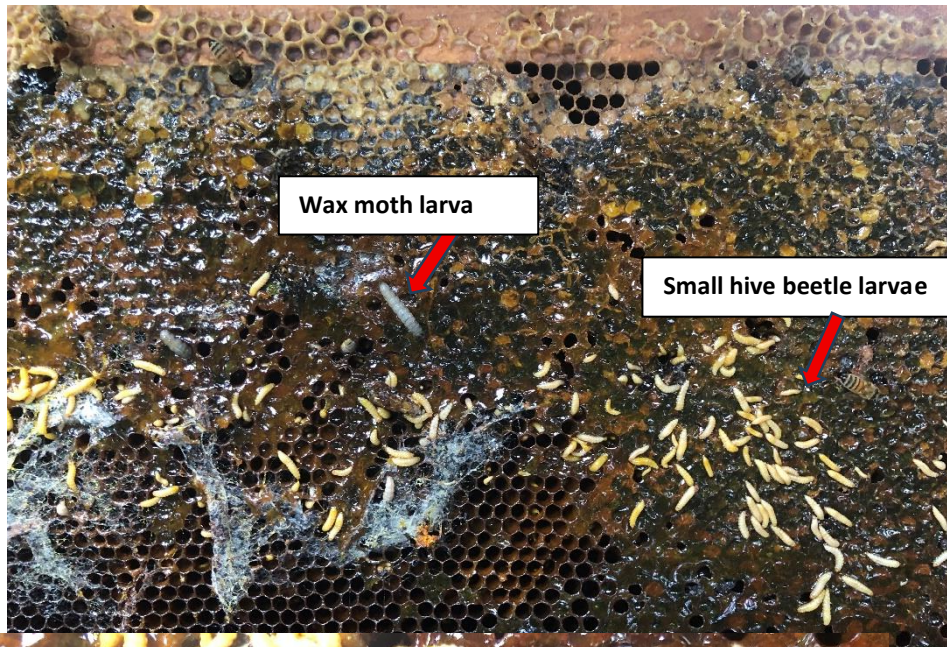


The best results I have found is with **Swiffer** disposable dry pads placed where the beetles seem to be gathering. Check the cleaning products area at your local grocery store for dry pads. Mites get tangled up in the material as can be seen in this photo. Place pads where beetles seem to hide such as on the inner cover

lid, or between frames away from clustered bees. One pad cut into sections will provide enough material that can be removed when inspections are made.

I can tell you from experience it doesn't take long for SHB to destroy a weak colony. Almost nothing other than the woodware – hive body, bottom board, inner cover and top cover can be reused. Frames for the most part and comb are a complete loss. Of course, the bees are either few in number or gone. If there is some honey in comb, it is an unusable fermented watery liquid with a sickening smell. Bees seem to ignore the honey in hives destroyed by SHB. Below are two photos I took of a hive four years ago. It was owned by a beekeeper who wanted my advice on what to do with the hive.

Photo 1



This is a frame I removed from the hive. It was slimmed up with a large number of small larvae almost swimming in fermenting honey. But notice the webbing and one large grayish larva much larger than the small larvae.

Photo 2



Wax moth and Small hive beetles thrive in hot weather. The wax moth larvae are much larger than the small hive beetle larvae but both are creatures of opportunity. Once the destruction begins, it doesn't take long for comb in frames to become a complete loss.

So, what advice could I give this beekeeper. Don't try to harvest the honey—it is already spoiled and would contaminate any honey added to it. Burn the frames in the hive – don't put them in the trash. I wouldn't even put frames like this into my solar wax melter to get the wax. There is not that much wax to be recovered. Maybe frames might be saved – it would require a lot of work to cut this slime out of frames. I can remember when West Virginia had an autoclave steam system available to beekeepers with American Foulbrood to recover frames and bee equipment exposed to AFB spores. Buying new frames and power washing old bee boxes is more cost effective. Coming up in the next issue is a report on AFB (American foulbrood), a far worse situation to be in than having a problem with SHB and wax moth.

American foulbrood exposed equipment carry spores and can affect bees put into future used equipment. Thus, burning equipment – everything that came into contact with the spores was the only way to eliminate the future spread of the disease. The wood or plastic used in a hive taken over by SHB or wax moth can be salvaged to some extent by washing in a disinfectant or power washing.



This is an autoclave being used to disinfect bee equipment. AFB exposed equipment was put into the chamber, closed up, and steam heated to over 300°F for a period of time.



Heat killed the spores that can live for over 50 + years in used equipment.

Faces in the photo have been blocked out. This is too expensive for the individual beekeeper but it does show that some states do have services to help local beekeepers with very serious disease issues.



Back to the small hive beetles – Rather than try to chase them around with your hive tool, I have found that a simple key board vacuum does the job nicely. The SHB cannot outrun the vacuum or hide in cells.