

Stahlman Beekeeping

Notes for 2022

Summer Beekeeping

More on SHB



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Bee Talk

To me the bee season is divided in two phases. The first season is winter to the summer solstice and then days begin to shorten. The first phase is a period of growth for a hive of bees. Hives produce drones. The queen lays eggs – sometimes 2000 a day and brood production is responsible for rapid population increases.

The second season (phase) is now upon us. It looks like there's plenty more hot weather to come but get out your calendar. How far are we from December? July is gone! How soon will leaves be falling from trees. Autumn is coming and the bees are getting ready for it.

The bees are not raising many drones now! Queens are laying fewer eggs. There are large populations of bees in our hives but the total population number of bees is being reduced day by day.

Robbing is a common feature of a hive of honey bees preparing for the fall season. There are fewer opportunities for bees to gather nectar and pollen. If plants are not in bloom and many of these older bees are unemployed because foraging flights are not fruitful, bees seek out other food sources.

Take this story I saw on a local web blog: "I checked my hive two weeks ago and they were doing fine. I checked today and they are gone! Why?" Two things come to my mind when I read something like this post.

- 1) The beekeeper doing the inspection assumed the bee population was okay. I am not sure what okay means. Inspection of a hive at this time of year requires one to check to make sure the hive has a laying queen and brood in all stages of development. Additionally, it is important to know mite levels, and the amount of food available. Bees need food not only to support feeding larva but food for the big population of adult bees in the hive. (Maybe you notice how feeding bees a quart jar of syrup allows one to see how fast the bees are taking down the food).
- 2) The second thought is they were not okay. I don't think beekeepers realize how rapidly conditions in a hive can change. Bees without food will often abscond. It is

anyone's guess where they go! Did they get robbed? Did the queen fail? Did small hive beetles take over the hive? What about mites?

I have the pleasure to work with a number of new beekeepers. I am available to help them with problems – keeping bees is learned with experience! We can read books, **but can we read the bees?** I like the term reading the bees. This includes bee behavior as well as identifying eggs, larvae, capped brood, capped honey, pollen, worker bees, drone and the queen.

What I see in a hive of bees is often something that sends up a red flag. In a long beekeeping career, there are some things I need to learn! I have learned to ask for help if I don't have an answer. Starting with the local bee inspector or a more experienced beekeeper!

When I do a hive inspection, there are signs that something is off/not natural. I call these things red flags.

- 1) I learned a long time ago that one can tell something about a hive by first examining the entrance – landing board to a hive. This does not substitute the need to pull frames from a hive. No inspection is complete until a beekeeper can determine from what is seen to what is going on inside a hive.

Red flag knowledge most often comes from experience: it is learned by working bees! Often several years of keeping and working with bees helps one discover what normal behavior is or what problems might arise in a hive of bees.

At the hive entrance:

I would expect active bees flying into the entrance of a hive to have pollen on legs. During winter we sometimes see bees returning with pollen. The amount of pollen collected will vary with the seasons. Even on a hot day and bee's are bearding on the front of a hive, some bee traffic will be seen.

A red flag goes up when I see something happening out of the ordinary. For example a flurry of action – many more bees entering the hive than those leaving. Bees flying about the hive rather than directly into the entrance. Experience has taught me to investigate further. This could be a sign of robbing or simply young bees taking orientation flights.

Opening a hive:

- a. When a hive is opened, are the bees curious and move up to take a look at

me? Are they calm and make a gentle hum?

- b. Are the bees aggressive and immediately going for my hands and face?
- c. Are they running aimlessly and making a loud noise?
- d. The hive can be judged basically on how many frames are covered with bees. I judge hives into four categories: **Very strong hives** (bees covering most or all of the frames in the hive), **Strong hives** (most of the bees covering all of the middle frames, **Weak hives** (only 4 or 5 frames covered with bees) and very weak hives (bees on 3 frames or less).
Anything less than strong require attention!
- e. Are there anything like ants, roaches, or small hive beetles in the hive?
Something might be done to correct the problem. Often ants and roaches are more of an issue for the beekeeper rather than the bees?

During hot summer days, there are few sources for nectar or pollen available. One task looms above all other – there is a need to feed all hives. If one feeds only the weak hives, the beekeeper is inviting robbing bees to wipe out the weak hive! Rather than help the weak hive, the beekeeper sets them up to be attacked. Robbing screens are a good investment and should be used if robbing does become an issue.

Management of Hive (Starting the process of pulling frames)

- a. Are frames glued together making it hard to remove them? This would indicate a lack of attention – Bees can propolize frames and add burr comb between frames quickly. All frames in a hive should be examined on a regular basis. By not removing the removable frames over a period of time it **makes removing frames** very hard to inspect a hive!
- b. Frames need to be inspected for a number of things!
 1. Is brood in all stages of development (spring, summer, fall)?
 2. Every hive must have a queen! Determine what you see.
Issues -- no eggs present (indicates the hive has no queen BUT the hive may have swarmed. If that situation is likely, wait two weeks and do a second inspection. Purchase a queen to restart the hive.
 3. Any sign of queen failure – shotgun brood patterns. If so replace the queen before winter sets in -- (ASAP)!
 4. Check for mites and other diseases. Often reduced bee population is an indicator that this might be the problem. Take action immediately.
 5. If the hive has honey in honey supers, decisions need to be made about harvesting the honey and how much honey to remove from the hive.

Remember that fall honey flows cannot be depended on and hives can die from hunger.

- c. Keep all equipment protected from weather issues. This includes such things as: make sure water does not flow back into the hive. High moisture during the winter causes many hive losses.

Future articles will deal with getting ready for winter but **NOW** is the time to make sure hives of bees will still be around for fall management. Only reading a hive (Checking the outside as well as the inside of a hive of bees) will determine tasks needed for a hive to survive so one can practice winter management.

I have been asked about a number of things: Can I still make up nuc? The answer is yes BUT. The days left in this bee season are shrinking rapidly. I see this when I have to write another newsletter. Months of beekeeping are already behind us.

Trying to make up nucs now requires getting a laying queen that can produce a number of young bees to take the new nuc through the winter. Making up a **nuc that needs to raise its own queen** reduces the chance for success. Keep in mind – a virgin queen must mate and drone populations are rapidly disappearing. Nearly a full month is required before the new queen begins to lay eggs. And during the brood break, many of the adult bees in the split will be dying. The new nuc will require favorable weather conditions, feeding, and other challenges facing all hives of bees.

Thus, I can say that making up a nuc with a laying queen makes a lot more sense to me! One adds another month of population build up giving the nuc a good chance to meet the challenges of survival.

Removing frames from strong well established hives has a negative consequence. Replacement frames should contain drawn comb. Drawing new foundation after honey flows is very difficult for the bees – in fact they may not draw comb at all! If any of you have some tricks you have for getting comb drawn this late in the season, I would appreciate anything you could share.

I also appreciate emails that share other thoughts from what I express in this newsletter. See the following:

From Yric Some interesting points he made from the email message he sent to me:

The key points that came to mind researching as a new backyard beekeeper,

- Make it a challenge **For SHB** to get into the hive. Bees are maze runners, they will quickly adapt.
 - I use **guardian beehive entrances** with no other entry point or ventilation hole available on the hive. They significantly reduces robbing and hornet raids. On my strong hives I have two installed and have a 3d printed wedge I put in if they don't have the numbers for two. The hive is now significantly easier to defend and maintain the HVAC inside. Side note, bees have been studied to try and develop better HVAC systems in large buildings.
- A better bee to SHB to **space ratio** will allow the bees to do what they need to do. This includes knocking beetles off comb and herding them into beetle jails.
 - I change my inspection cycle from weekly during the flow to every three weeks. Every time you crack the lid you free the captured beetles and disturb the bee HVAC. I depend on landing board activity to tell me if I need to change my schedule. I'm out there almost every morning drinking my coffee before work checking on the gang.
- **Break the reproductive cycle.** Knowing that the bees will knock the beetles off comb and chase them, a deep tray under a screened bottom board filled with Diatomaceous earth works on all three stages of the beetle in the hive, especially the point where the larva are looking for ground to borrow into. Instead of trying to get out, they dig into it and die breaking the cycle, even if it's crusted over due to the humidity. You will lose a few bees to it because they're bees, they can pretty much get into anything.

From Rick B.

Dana,

I saved about 10 frames that were infested and slimmed by hive beetles by immersing in a large plastic container of soapy water. Just added a large amount of Dawn dish detergent to the water. No Clorox. Weighted the frames down below the water line with short sections of 4x4 landscape timbers. 24 hrs later, removed the frames and shook the soapy water out. Then repeated with clear water a couple of times. Final rinsing was done on each frame with water hose. Set out to dry.

Also received several who suggested Swiffer sheets for controlling SHB:

Nancy H.

Swiffer sheets are great for trapping small hive beetles. They may tangle up a bee or two but can catch the beetles in large numbers. These pads are normally used to wipe dust from surfaces in your home but I have found them useful as homemade small hive beetle traps.

And a suggestion to check out YouTube: www.youtube.com/watch?v=tzOzQnm5emY

I have not tried Swiffer sheets. I would appreciate any feedback on readers experience with them. I have used beetle jails but in a bad situation, they were not of much help.

Thanks for the comments from readers.