

Stahlman Beekeeping Notes for 2022

Summer has arrived ---
Queen Excluders



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June 21 is the summer solstice. It slipped up so fast on me that I had little time to really appreciate what happened.

Since prehistory, the summer solstice has been seen as a significant time of year in many cultures, and has been marked by festivals and rituals. Traditionally, in many [temperate](#) regions (especially Europe), the summer solstice is seen as the middle of summer and referred to as "midsummer". Today, however, in some countries and calendars it is seen as the beginning of summer. From Wikipedia, the free encyclopedia.

I find great interest in the ebb and flow of bee populations in a hive of honeybees. Honeybees are inseparable from plant cycles. During the spring, honeybees have almost an unlimited supply of nectar and pollen sources and they use it to good advantage to build strong populations. Swarming is often the result. The instinct for food gathering is strong thru the entire year with bees flying even during the winter season seeking food that might be available.

In some areas of the United States, the honey flows are just beginning. I communicated with a friend in Indiana that indicated to me this past week that their flow for basswood honey is just starting. In fact, many northern beekeepers will be harvesting honey up thru September.

Some beekeepers here in North Carolina move bees to the mountains to gather various sources of honey especially sourwood. That flow is just beginning. What is normal in some regions is not available to beekeepers in other regions.

I have some readers in British Columbia, Canada. Canadian beekeepers sometimes get great honey crops. The further north one goes, the daylight hours of summer are longer –with the earth's tilt, some have 24 hours of daylight. Keeping bees has a regional flavor.

When a honey flow is strong and conditions are good, bees fill the air as they seek blooming plants. Keep in mind that blooming plants are available to bees for a short time. Bees will fly from the hive early in the morning and continue until the sun sets. It is their instinct to save as much as they can to accumulate reserves for winter.

As beekeepers we know it is time to add supers as soon as we see bees building new comb. The bees naturally fill cells with honey and pollen and soon the bees nest is congested

resulting in swarming. The remaining bees in the nest are rewarded with a hive well supplied with food for the coming winter. That is the nature of the honey bee!

Swarming will be with us for some time during the summer. I was asked, “Is it time to take down swarm traps?” I still am hearing of swarms on local bee blogs.

Beekeepers are often faced with problems at this time of the year.

- The worker bees are finding food sources limited!
- Very aggressive bees!
- Hives without brood – no eggs, larvae or capped brood.
- High Varroa counts!
- Weak hives

Face it! Honeybees have an addiction to gather and save nectar and pollen. I have seen some queens produce worker bees that fill most of the cells on a frame with pollen. Others are great nectar gatherers. And some hives are great at robbing when the honey flows end.

All of this makes keeping bees a challenge. I have started taking Varroa samples and I am finding Varroa mite populations growing – more mites detected than earlier in the season. As soon as honey is harvested, treat for mites. It is too hot to use Formic Pro as a treatment for mites. I just read a local blog post in which a beekeeper using Formic Pro lost what he said was half of his bee populations

Queen excluders:

To use them or not use them, “That is the question!”

There are beekeepers that will not use them and others wouldn’t keep bees without them.

I believe they can be used effectively under some conditions but also believe they are “honey excluders.”

Bees and queens have a tendency to work up rather than down. Bees will enter supers on hives more readily when no excluders are used. Queens then move up into upper supers and lay eggs in the comb.

Some beekeepers successfully use queen excluders. To get honey, they allow the bees and queen to move up into a super above the brood nest. Once the comb is being worked and the queen lays a few eggs, the beekeeper smokes all the bees back down into the brood chamber and installs the queen excluder. Once some brood exist above the queen excluder, bees move up thru it and continue to store honey. The new brood in the box will emerge and bees will fill those cells with honey. When the second round of supers are added bees will continue moving up thru the queen excluder.

Some advantages:

- If single or double brood chambers are used for the brood chamber and the queen excluder is used, the hive will be better supplied with honey and pollen for winter stores than hives in which queen excluders are not used.
- Pollen is almost never stored in comb above a queen excluder.
- Queen excluders are mandatory for those producing comb honey sections, Ross rounds and cut comb honey.
- Queens are confined to the brood chamber and are easier to locate. A damaged queen excluder may allow a queen to squeeze thru it.

The only objection that I can find about using a queen excluder is they do serve to discourage bees from moving up into honey supers resulting in swarming issues.

I usually recommend replacing old brood comb in hives. Old comb that has raised brood eventually turns almost black. That is because brood is raised in them – honey supers may have frames 10 to 20 years old that still have light colored wax in them. I do not cull them as I would brood comb frames.

Some observations from the hives of students I am mentoring:

A bee inspection as June closes out is very important!

We are doing mite counts,
Checking on brood patterns, and the quality of the queen,
Checking on the temperament of each hive [some have very bad attitudes],
And showing a few lucky enough to have honey in hives, how to extract.

It is only natural in a bee yard for bees to fail. It is my job to help my bee buddies avoid some of the common problems.

Often a hive may need to be requeened. I look for scattered brood and signs of shotgun brood issues. I look for the amount of drone brood vs worker brood. Drone brood populations should be declining at this time of the year. A lot of drone brood may indicate a problem.

Angry Bees!

When a beekeeper is scared of their bees, it becomes a real problem. Bees can sting thru gloves and bee suits. Anyone standing near is at risk of being stung. I handle a problem like this by saying, "If I suit up the queen is dead. I can cause the hive more trouble than they can give me!"

The problem for me is this: beekeeping should be fun for new beekeepers. To own a hive that one dreads to open is not fun beekeeping. I am a bee lover! But when it comes to working a hive like this, I have no hesitancy to kill the queen and requeen the hive.

It takes time for a colony exhibiting aggressive behavior to calm down even after the queen is killed. There is still brood in the hive developing and living for up to 60 or more days.

One thing I have observed over the years is that these angry bee hives often are good at filling supers with honey! Problem is: can you tolerate angry bees?

Bees need ventilation during hot weather conditions. Heat over 115 degrees within a hive will cause bee death. In many cases one can observe bees gathered outside a hive during hot weather. This is called “bearding.”

Bearding is a way bees open up airways within the hive. Rather than blocking space between frames, the bees are providing a path way for good air circulation. Bees will gather outside the hive or under frames just above the bottom board. The photo below shows bees gathered under frames – a very common thing with screened bottom boards.



Beekeepers can provide hives with better air flow (ventilation) during hot summers by using screened bottom boards and screened inner covers.

Another device often used by beekeepers to provide room under the frames of a hive is a slatted rack placed between the bottom board and the brood box above.

Some beekeepers will use nails (8 penny size) placed under the inner cover to allow for more air movement in and out of the hive. The small space created prevents other bees from getting into the hive – such as robber bees.