Stahlman Beekeeping Notes For 2022

Inspecting a colony

Spring management

Issue # 18 April 30, 2022

This year has presented us with some challenges -- frost and winter like conditions well into April.

Beekeepers want to start as early in the season as possible. Those who start EARLY look for a great start hoping early flowering trees will provide the bees with plenty of food. What happens when flowering buds on trees are killed? There is a loss of nectar and pollen. Those farmers growing strawberries, apples, and other early fruiting plants face partial to complete crop losses.

This happens at the same time when bees have a great need for food -- young larvae to feed and winter stores diminishing. It has long been known that many hives die from starvation in early spring. When the supply of pollen and nectar is interrupted the amount of brood rearing is also interrupted.

During some seasons of the year, beekeepers must be prepared to feed colonies of bees. A general statement would be "feed in early spring and fall – Do not feed if the bees have enough food unless you are making increases". Frequent inspections can help one determine when and how much to feed.

Keeping bees healthy and productive involves learning when to help your bees and when to leave them alone! (An old adage from 100 years ago).

Right now a giant tulip poplar tree in my front yard is in full bloom. This is a bit earlier than last year.

- **Those beekeepers with strong hives need to be adding honey supers. This is a bit of a dilemma with those starting package bees on new foundation.**
- **Now is the time to get new comb built on foundation. New beekeepers that started packages in April will need to be feeding hives. Feeding hives with sugar syrup stimulates wax production. Bees will also mix the syrup with nectar/honey coming into the hive when it is put into cells for storage.**
- **If one is wanting a honey crop, feeding should stop when supers with drawn comb are added.**
- **A good supply of supers ready to put on hives should be ready now!**

- **During a good honey flow, bees can store 10 pounds or more nectar a day.**

What are the signs that indicate the beekeeper should be adding supers?

- **New white comb along the top bars of frames.**

Honey bees will fasten top bars to the bottom bar of the box above with comb. This comb could be filled with drone brood or honey. White wax is a sure sign that supers need to be added.

If supers are not added the result is a honey-bound brood chamber and the bees most likely have already swarmed.

- **The bee hive has a high density of bees.**

A population of bees covering all the top of frames in the hive is a good indication another box should be added. For a new beekeeper this might indicate another brood chamber needs to be added.

For one with a strong hive, the need for a honey super is now!

Note that bees ready to swarm seldom work eagerly on wax building, and adding a super of foundation will not prevent a hive from swarming.

- **Swarm cells observed during an inspection. This topic of swarm prevention has already been covered but if a honey crop is going to be gathered, one can carry out two procedures that can take advantage of the way honeybees are managed.** **See next page!**

Swarm Prevention:

I have mentioned in several talks made over the past several weeks how valuable foraging bees are to colonies.

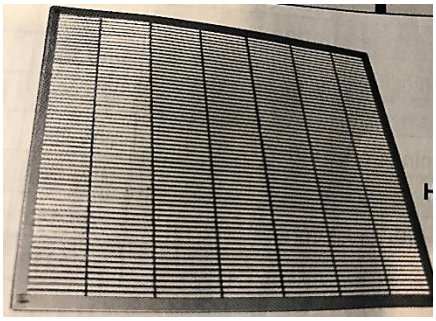
A large swarm in todays honey market is worth 40 to 60 pounds of honey lost. Let's assume you are selling honey for $7.00 a pound (I know some of you will say why so cheap?) This is for illustrating a point. 40 times 7 = 280.00 That would be the loss $280.00 in honey sales and if you are selling honey – that is going to be 40 to 60 pounds of honey you are not going to have!

Field bees all return to their hive location! This applies to both examples I am passing along.

1) **The brood chamber containing the queen and brood can be placed on top of the colony, separated from the bees below by a double screen. The queen can be reunited with the colony after the honey flow is over. Bottom supering is required when more honey supers are added.**
2) **A colony can be divided setting the brood chamber and the old queen aside. Usually it is best to place this brood chamber on a bottom board facing in another direction behind the old hive location. Then cut down queen cells. The next step involves setting a new box in the old location, remove brood from the hive set aside without queen cells and add new comb to fill out the boxes.**

   It is important is to place a queen excluder over the new hive body in the original location and start adding honey supers. They may raise a new queen but remember one wants bees flying and collecting honey. The foraging bees all return to this hive and will store nectar in the hive. Bees in this hive will have little work to do feeding brood. But they will store honey both above and below the queen excluder. As brood emerge, the bees will store honey below the queen excluder. Boxes full of honey can be extracted and the old queen reunited with the hive following the honey flow.

A note about queen excluders



Queen excluders are called honey excluders. Bees are sometimes reluctant to pass thru them. When placed above a brood chamber it will keep the queen from moving up into honey supers which is good.
However the bees often prefer to store honey below it. Thus, it is a contributing factor to swarming.

Wax moth warning

The adult wax moth will lay thousands of eggs. These eggs hatch when the weather warms up and they become larvae. Larva are voracious eaters. They prefer drawn brood comb.

Stored honey supers are an early target but as the season progresses, weak hives are the target. As a former county bee inspector in Ohio, I saw a lot of hives taken over completely by wax moth. Just a few photos from my collection illustrate what damage they can do.

These webbed tunnels are an indication that wax moth larva are at work on this comb. It doesn't take long before an entire frame is covered in a mass of webs.

"It has been said that the wax moth never causes the death of a colony but is merely the pall bearer at its funeral" quote from John E. Eckert and Frank R. Shaw and previously by Everett F. Phillips. These were notable writers of beekeeping books from past years.

Wax moth desire frames of comb containing protein contained in the stored pollen, cocoons, and other materials in the comb. Thus darker brood comb is a better target than comb free of brood or foundation.

Larval growth depends on temperature and the amount of food available! I have collected samples of wax moth in various states of development.

This is an example in my collection.
The wax moth larvae is much larger than small hive beetle larvae. Fully grown moth larvae are close to an inch in length compared to the SHB ¼ inch.

When the larva complete this growth cycle, they gnaw out an oval depression inside the frame or super and spin a dense white cocoon. This usually permanently marks wooden ware (hive bodies and frames) with scaring.

Both the wax moth and small hive beetle are pests that invade bee hives. It is important to recognize their presence quickly and take action.
I will be sharing information in upcoming articles on how to deal with these pests.

When checking frames note the differences in this frame and the frame taken from a hive with wax moth damage shown above.

This is small hive beetle damage to a frame. Note the larva are much smaller. They are scattered on this frame as indicated by blue arrows.

The comb will appear slimy and a cell may contain several larva.

The webbing is missing but one can occasionally find both wax moth and small hive beetles in the same hive.

How to treat a hive for early infestation of these pests -- See next issue # 19