

Abandoned Bee hives (Part 2)

The mystery inside the bee hive

As most of you know this spring was a long extension of winter. Based upon my past experiences many hives of bees alive in January and early February are dead by March. Thus, I was uncertain of this hives survival until spring arrived and the question about the bees would be answered. As it turned out, the bees did survive the winter and on April 22, 2013 I was able to begin the transfer from the old abandoned hive into equipment which would allow me to manage the bees. I knew from past experience that a bee hive that has not been managed for a number of years presents problems. First, frames are usually glued (propolized) into place. If the hive died out and at some point wax moth had destroyed the comb, I would find cross comb rebuilt by the new bees in the hive making it almost impossible to remove any frames. Old frames are fragile and if I had to pry frames from the hive body there would be a lot of damage. I had to be prepared to tie comb from within the old frames into new frames. I put together the tools I would need. First, I realized the hive tool would not be the best tool to use in removing frames. The hive tool would be essential to scrape and cut burr comb and propolis from the frames. I had previous experience in taking unmanaged hives apart and I can assure you that one never knows what is below the inner cover once the hive is opened up. My kit consisted of a hammer just in case I had to remove one side of a hive box to get the frames out, a pry bar (heavier than a hive tool) to pry frames from the rabbet of the hive boxes, a pair of scissors and some string, extra frames with drawn comb, and some empty frames without foundation just in case I would need to go the extra mile and tie brood comb into them, and a good fire in my smoker and protective clothing. Taking a hive of bees apart by prying frames from each other is not going to make for a lot of happy bees.

Again it is easier to share this story with photos.

Here is the hive a couple of months later. Still no bees in the super above the queen excluder. The inner cover has been pried from the honey super. It cannot be saved.



Note that the new hive body, and bottom board are placed next to the abandoned hive ready to receive the usable frames and new frames if necessary. Once the transfer process is well under way, the new box and bottom board will be placed exactly where the abandoned hive now stands.

This is a look in the entrance of the abandoned hive. The bees are coming and going and indicate a fair population of bees. Note the propolis built by the bees to reduce the entrance opening. The original pallet for this bee hive protected this bottom board from sinking into the ground. It is not salvageable. Usually one of the first pieces of bee equipment to rot or fail is the bottom board. Also notice something that looks white in the entrance (more about that later).



The honey super

The honey super has white plastic frames indicating that this super was added at a time when plastic was available and fits with the farmers description that the last this hive was managed occurred about ten years ago. This view is from below and still shows nuts stored by some creature that used this nice dry comfortable abode during some absence of honey bees. There is no indication of wax moth damage to the hive which tells us again that bees have occupied this hive for some time and the interruption in



bee presence was brief.

The Queen Excluder

Normally the queen excluder is removed before winter. In this case, it had been left on the hive making me wonder why? The hive might have been managed thru the summer of the year it was abandoned. But as you can see it is heavily covered with burr comb and there is damage to one corner. I did not want to salvage it and using it again did not seem to be a wise choice to make.





Top deep brood chamber

The cluster of bees can easily be identified. In selecting the side of the box to start removing comb one must start as far from the cluster as possible. In this case the choice is easily made.

The first frame to be removed is near the bottom of this picture. First we see no bees on it and because we will need to pry it out the propolis and burr comb and any burr comb on the bottom bar would likely crush

some bees as it is moved upward. As it turned out both this frame and the frame next to it were filled with honey stores.

The first Frame removed

Note the top bar is heavily propolized and I have tried to show how the bees glue and build burr comb to a frame that has been in a hive body for a long period of time. Not only were the ears on the top bar well attached to the rabbet but the bottom bar was attached to the frame below and the end bar was attached to the brood box. The interesting thing is the bees still remained fairly quiet thru the rough effort I made in getting this frame out.





Plan on doing some damage to top bars as frames are removed no matter how careful you might be.

Frames are removed one at a time by prying them away from the cluster toward the open part of the hive box.

Prying frames from the brood chamber box.

Notice the use of the hive tool. I use it to clean the burr comb from the top bar and bottom bar and any other scraping action needed with the hive.



The time to start cleaning burr comb from frames is while the frames are still in the hive body. The top bar is quite easy to clean this way while the bottom bar and end bars can be cleaned only when the frame is removed.

If there are bees on the frame removed from the hive, be sure to check for the queen before you start removing any burr comb.

Once frames can be removed the mystery of the hive's health, brood pattern, queen and condition of the comb can be evaluated. This can only be done using this method of transferring bees into a new home. You may have been thinking there might be an easier way to move the bees from this hive into another hive body! There is and it is a method much easier than the one I am using. However, you must wait a period of time before getting answers to the hive's health etc. That method is simply removing the super and queen excluder and placing a new hive box (the new home) on the hive and wait until the bees move up into it. I do not have the patience to wait that long to see what I found.

The condition of the frames and comb in this hive indicated that I could move them into the new hive without much trouble but I would have to replace them soon. Of the seventeen frames in the two brood chamber boxes, I found that I could use at least eight of them in the new hive.

A look at the frames and comb

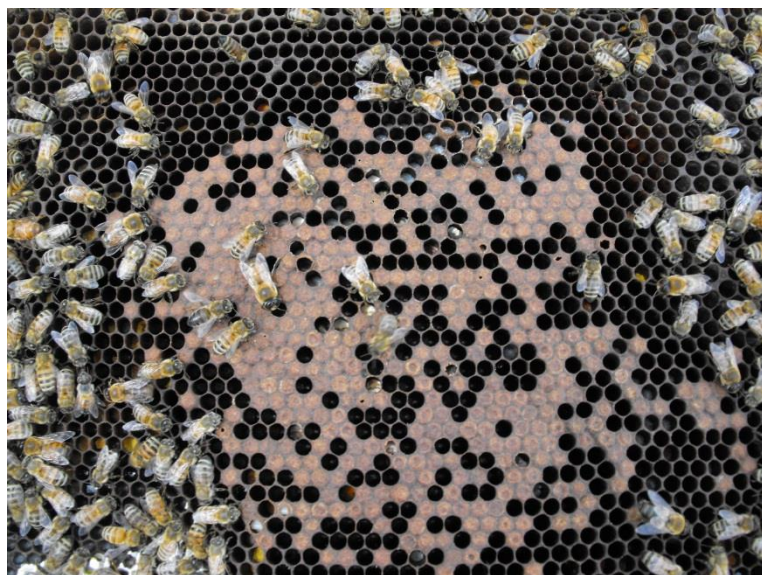


The first two frames removed were filled with honey and would provide a food supply for the new box. The comb in those frames was old and black and as soon as the bees use the honey stores, new frames with new foundation will replace them. The cluster started on the third frame in from the side of the box as shown here.

I removed this frame carefully. I was hoping to get lucky and find the queen but after the frames was out of the box, I found this frame with some

brood but it needed to be replaced immediately.

A close look at the brood pattern indicated that the queen was laying and there was brood in all stages of development. However, if you look closely you will see a problem. My heart stopped when I saw this – dead chalk like mummies in quite a few cells. Remember that white object on the bottom board entrance in an earlier picture. Even before I opened the hive, I was aware there might be a chalkbrood problem. A quick check of the bees on this frame indicated that the bees were removing some of the mummies and I did observe some drones. But this frame is not something I wanted to transfer into another box. The big question was “what would I find on the next frame removed from this hive?” Since this frame was on the outside of the brood cluster, I knew that I might face the problem of shaking all the bees onto new comb. This was not American foulbrood which would have stopped the transfer process immediately and condemn this hive to the burn pit.





This frame was also very old. In fact the comb had been built on the aluminum embossed foundation used many years ago. Some of the aluminum foundation can be seen in the lower left corner. This foundation was last sold in the late 1950's. It was not popular because if the wax for some reason was removed from the aluminum, the bees refused to put new comb back on it. This product was sold as Eby's Permanent Foundation. It was sold as "the greatest advancement in Bee Comb Foundation construction in years! Makes wired

foundation obsolete Durable, Long-Lasting ALUMINUM is inter-leaved between two sheets of 100% Bees Wax" and to my knowledge has not been advertised for sale since 1959. It was not widely accepted by beekeepers for use in their hives regardless of the hype given to it by Eby.

Old comb contains a lot of bad stuff and this frame illustrates a good reason to replace old comb before it can become a sink to promote diseases such as chalk brood fungal spores.

The next frame was not affected with chalk brood or were any of the others that I removed. I decided to keep most of them because they were filled with eggs, larva, and capped brood which would help this hive move on after the damage I was doing to the box and frames. This disease problem also caused me to change my plans on how this hive would be managed over the rest of this year.

So far I had a good population of bees, a queen, and bees that seemed to attempt to clean up the disease problem.

I had old comb and hive equipment which needed to be replaced on a managed schedule. I could save and use these bees. I would have to use comb I did not want "to save the egg laying effort of this queen".

Part III will cover the management of this hive thru 2013.

