STAHLMAN BEEKEEPING

NOTES FOR 2025

Published by Dana Stahlman Raleigh, North Carolina
Published free as a public service to anyone interested in honeybees. Email me to be added to my mailing list. stahlmanapiaries@aol.com

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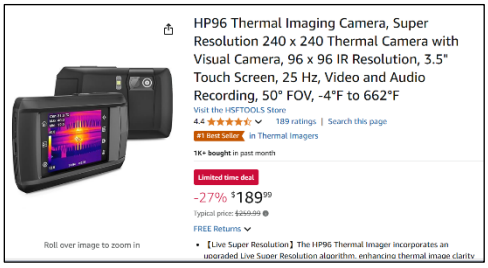
Winter has arrived in Raleigh. Just a week ago bees were flying and now no bees are seen outside the hive. **It is interesting that I was asked to make a presentation about winter beekeeping some time ago and was struggling to find pictures to show cold weather.**

Having lived in Ohio for 75 years, I am familiar with cold weather. We did work bees in the winter. I went back into my photo collection of moving bees from Ohio cold to Georgia warm weather. Cold weather hits Ohio hard sometimes in November. Cold weather for weeks at a time and I have heard it said that bees should be left alone during the winter season. I firmly believe that bees should not be disturbed and getting them ready for the winter season begins long before winter arrives.

The big question is "Are the bees in this hive alive?"

A person with temperature sensors most likely could answer that question by looking at their cell phone.

Or an infrared camera might help as shown. I checked Amazon to see how much one would cost. See the ad below.



The technology today makes it easy to see what is going on inside a hive covered with snow.

Most of us don't have this technology available so a bit more effort is required if you want to see if your hive is alive during this cold weather.

Several methods have been used to determine if a colony is alive.

- **During the winter season, honeybees are dying all the time and fall to the bottom board. Often seeing a few dead bees at the entrance is a good sign that the bees are alive. The same if some are on the ground/snow in front of the hive entrance. This is an indication that living bees carried dead bees from the hive or died when they hit cold air when flying from the hive.**
- **Heat rises to the top of the hive and bees if alive give off heat. Place your hand over the inner cover hole to see if you feel heat. If you do, the bees are alive.**
- **I have heard it said that if the bees are up around the inner cover hole, the bees may not have enough honey stores and it is good to feed. My emergency feeding method is to put granulated sugar around the inner cover hole where bees will get to it.**
- **Removing the inner cover in cold weather like we are having here in Raleigh 20ºF is just wrong. The warm air escapes -- you will not be helping any bees in the colony if they are alive.**
- **Another method to check to see if the cluster is alive is to knock on the side of the hive body. This distrubs the bees inside and one will hear a slight buzzing. One can put their ear to the inner cover hole to listen to activity within the hive. I have been surprised more than once to hear no sounds only to try to open the hive and pull a frame to discover that the cluster was there. Thus, give the bees a break and wait for a day when the temperatures are above 40ºF to check – look down between the frames to see bees. Don't pull frames unless you see a few bees flying from the hive which they will do even at 50ºF.**

Another issue at this time of the year is honey stores. This is a critical time because once the bees begin to feed brood they will need both pollen and honey. Winter feeding should be in a dry state rather than liquid. It is important not to introduce moisture into a cold hive.

If you see wax chips and animal droppings you might have mice in your hives. Don't open your hive to get them out until warmer weather. They will cause some disruption to the bees but often isolate their nest near the lower part of the hive well away from the bees. An entrance reducer like shown below should keep them out of the hive.

Dead bees blocking a hive entrance - Most likely this hive has died. Another thing I have noted over the years I kept bees in Ohio, no dead bees on the landing board may also indicate the colony is dead.

Expect cold weather to flux between warm and cold periods even in northern states. Visit hives on those days that might have high winds to check to make sure hive covers have not been blown off, or in rare cases, a tree has fallen onto a hive.

This is the time of year when you should be making plans for managing your bees for this coming season. Right now the chief concern is keeping your bees alive and that can be summed up by feeding bees to avoid starvation.

Remember beekeepers have seasonal cycles just like the bees. If equipment is needed, it is time to order what you will need. It is also a time when you can read a book or magazines. Once the weather breaks with plants beginning to bloom, the bees will be several steps ahead of you and it will be catch-up time.

Snow is a blanket that helps insulate a hive from extreme cold. Bees need to be protected from blowing cold freezing air.

This is a hive I wrapped in an old tarp and provided a wind break. This was taken when I lived in Ohio at my farm. Note that my barn provided a big wind break but trees and that pallet set up behind the hive helped some. Also note there are hives near the bottom of this picture.

This was the drive to my barn. And that little dot between the trees is me. High winds and blowing snow require some protection for bees.

Honey bees in winter live in total darkness. The cluster is well formed and gets tighter as temperatures fall. Survival is based on the size of the bee cluster. Small clusters cannot maintain the required temperatures to survive and protect brood if the queen has started laying eggs.

Thus, it is important to locate bee hives with protection against something like this. I could dress up to protect myself but without a house to protect me and some warmth, there is no way I could last for long out in weather like this. A single bee has no chance to survive. Or if bees select a poor location to place a nest, they will not survive either.