



STAHLMAN

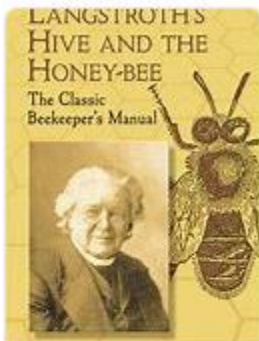
BEEKEEPING NOTES

L.L. Langstroth

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24

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Hot Weather Beekeeping & A Bit of History



Langstroth's
Hive And The...

\$15.91

Amazon.com

★★★★★ 171

Shown above is a photo of L.L. Langstroth, the father of American beekeeping. I would hope that every person wanting to keep bees would recognize his contributions to modern beekeeping! On these hot days it might be good to get a copy of this book – yes even after 172 years this book is still being published. And Amazon will have it at your door step most likely tomorrow!

No matter where you live, this summer has been and continues to be hot with records being set almost anywhere. Judi and I traveled to New York State this past week. I was looking for cooler weather. It was actually hotter there than in Raleigh. I do have a heavy travel schedule this summer and in a couple of weeks will be heading back to Ohio. I have been invited to a special event to celebrate the Rothenbuhler Bee Lab which really isn't that old – built in 1985 with the support of beekeepers across the state of Ohio. It is about to be torn down to be replaced with a Welcome Center on the OSU campus in Columbus, Ohio. In fact the entire agriculture complex on the west campus is or has been replaced with modern buildings and does not fit

into OSU's future growth plans.

More on that later in this issue. Now for hot weather beekeeping.

Some have asked me when is it a good time to work bees. Not now in 100° F heat! The bees will be hostile – more so than earlier this year. One can do a quick inspection earlier in the day when temperatures are in the low 80's and finish up before they get to the 90° F range. This is not the time to keep a hive open for long. Maybe a check for mites for example can be done on a day when the temperatures are lower. I have been invited to help with a queen rearing project here in Raleigh. Looks like maybe Monday or Tuesday of this next week will allow some hive work. But to raise queens one must have drones to mate with virgin queens. I will be able to report on that in the next issue.

I checked my bees early in the morning this week just to make sure each had a queen. It was necessary to pull just a few frames to determine they were okay. I also saw no drones – not one. We usually think that the bees throw the drones out when winter comes. My bees must be hiding them or they are not there. I can say I didn't think it important to search for them (do a complete hive inspection). You will see bees bearding on the front of hives during these hot days. That is normal behavior. Bees need water to cool the inside of the hive and will be flying to find it. The bees outside the hive have opened up the spaces between frames for air circulation within the hive. When it cools down they will return to the interior of the hive. Bees are very efficient when it comes to cooling the interior of the hive.

Some facts about hot weather and honeybees.

Bees exposed to 113° F result in 100% death in experiments carried out by various researchers. Consider using screened inner covers, screened bottom boards, slatted racks over the bottom board, or placing shade over the hive.

Hive entrances should be completely open so fanning bees can create air movement. Some report that hives in full sun do well because the varroa mites cannot tolerate heat. Closing up the entrance on a hive in hot weather is a sure way to kill bees inside the hive. Those moving bees in hot weather should remove top covers and use moving screens. Honeybees create heat. It has to be removed from the hive. I know of stories of people who sell package bees that have killed bees in the package because the bees were loaded into a trailer or truck without any ventilation.

One more little tid-bit: I don't know how many of you have had the opportunity on a cold winter day to put your hand on the center of a top cover. If the bees are alive, you may be surprised to find some warmth at your touch. I use the sun to melt wax from cappings. The temperature inside the wax melter gets to 148°F or more. Put a crack say ¼ of an inch all around the lid and the wax melter will not do a good job of melting wax.

If your hives are in full sun, a quick fix is to place a wood inner cover over the top cover with a few spacers to allow air movement between the top cover and the inner cover. Metal top covers absorb heat. Just go out at noon and place your hand on a metal top cover. I am not sure how long you can hold your hand on it. Black surfaces absorb heat, white surfaces reflect heat. You most likely have some other things to suggest. If so, I would appreciate hearing how you help your bees avoid some of this heat.

The beekeeping program at The Ohio State University at one time was one of the leading beekeeping research centers in the U.S. Ohio was the home of L.L. Langstroth and his grave site is located in Dayton, Ohio. The A.I. Root company founded in the 1870's has a long history and continues to publish Bee Culture Magazine but now makes candles – not bee supplies.

Back to the early 1900's, the OSU bee yard was located where the Ohio State Football stadium is now located. The original bee cottage (about the size of a large garage) was moved to a location on the Waterman Farm on the west campus in 1924. In the 1960's- 1980's that beeyard was used by

Dr. Walter Rothenbuhler to conduct research on developing a line of resistant bees to American foulbrood.

In 2008, Dr. Jim Tew let me know that OSU was going to convert the beeyard to some other use and the trees and the Rothenbuhler cottage was going to be destroyed. Prior to that in 1985, a new bee lab was built several hundred yards away. Some very famous researchers worked in that old bee yard –the list of students that received training under Walter Rothenbuhler and Vic Thompson are close to retirement or have retired. You may recognize the name Susan Colbey who worked in the bee yard to continue her efforts to raise better queens during the late 1990's.

I might point out that Ohio had another honeybee program at OARDC. Ohio Agricultural Research and Development Center (OARDC) is the research institution of the Ohio State University College of Food, Agricultural, and Environmental Sciences in Wooster, Ohio where Dr. Jim Tew was the Ohio Extension beekeeping expert and taught classes in beekeeping for those that might become commercial beekeepers. He is now retired and the facilities for bees has been converted to other uses.

A month or so ago, Barbara Bloetscher, the Ohio Apiary Inspector and a close friend, contacted me with the news that a big change was happening on the west campus. Agriculture was being moved to Wooster.

"I was wondering if you have any pictures of Dr. Rothenbuhler, his original cabin that you helped move to Wooster, or him in or near the "new" Rothenbuhler Bee Lab. OSU in its short sighted greed, plans to tear down the building and construct a "Welcome" Center in its place. They have already torn down the cow barns, all the related buildings and moved the cows to Wooster (or the chopping block)."

I now live in North Carolina where the NCSBA (North Carolina State Beekeepers Association) has taken steps to prevent something like this happening at North Carolina State University. I have seen progress and there is no stopping it. For those of you that do not live in North Carolina, the NCSBA and the state legislature have made it possible to raise money to establish a new bee lab and a permanent position for a professor of Apiculture at NCSU. Bee clubs and individuals throughout N.C. have raised over \$600,000 dollars to help in that effort. This is an endowment that will grow well into the future. With agreements between the state legislature, NCSU, and NCSBA, the future to provide beekeepers with valuable services will continue.

The problem is the bee lab in Ohio was located in an area that is now a sport complex, hospitals & expanded growth with an eye on more development. Just like it was back in the 1920's when the land across from the Olentangy River was open fields and became the west campus, bees were moved to a place out of sight and out of mind. OSU still has a pollinator program that does include honey bees but the focus is on all pollinating insects. OSU is almost a city in its self with over 60,000 students and still growing.

For me personally, it is like erasing my past. I was involved with the West Campus and knew many of the individuals who were what I call "movers and shakers" of the beekeeping industry.



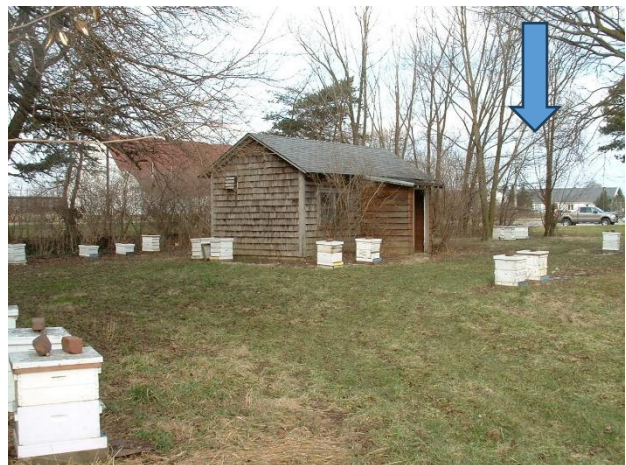
This is a picture of Sue Colbey along with Ron Hoopes, a past president of OSBA. This picture taken January 21, 2007 next to the Rothenbuhler bee lab.

The new bee lab replaced what was considered an out-dated “run down lab” and the new building was named the Rothenbuhler Bee Research Laboratory. The project cost was a little over \$300,000.00. That was in 1985.



Unfortunately I have a lot of pictures from the bee yard but none of the Laboratory building. Ohio State Beekeeper board meetings were held in the new building for about 10 years. Walter was a student of Dr. Park getting both his Master degree and Phd. Degree at Iowa State University. He was at OSU for 29 years and set the standard for hygenic genetic studies at OSU. One of his students was Robert Page. His successor at OSU was Dr. Page who along with Harry H. Laidlaw Jr. wrote “the book” on queen rearing. If you can find a copy of Queen Rearing and Bee Breeding by Laidlaw and Page expect to pay dearly for it.

This is a picture of the bee cottage that was torn down and and saved in 2008. One can still see it in Wooster, Ohio on the OARDC campus. This building originally sat in the parking lot next to what is now Ohio State’s Football stadium. Maybe it is the only link to what was the center of research on honeybee genetics for a long period of beekeeping in Ohio. Dr. Rothenbuhler had classrooms and an office on on the main campus and research conducted with the help of Victor Thompson are available in the archives of OSU. Most will have forgotten something called the Brown lines and Van Scoy lines. But that work set the standard for studying the mecchanisms of resistance and the multifactors associated with resistance to disease.



OSBA (Ohio State Beekeepers Association) and a number of bee clubs in Ohio spent \$4,500.00 getting all volunteer help to take the building down and move it. The farm manager told me they were going to drop the trees on the building and burn all if it was not moved. Are you wondering what happened to all the bee hives. I was told they were moved into a pile and burned – yes all of them because some thought the comb might have contained AFB spores from the days when Vic and Walter carried out experiments on developing a line of AFB disease resistant bees. As far as I know, almost all the beekeeping stuff in the new lab and this old lab were destroyed by a tornado on September 16, 2010. Dr. Tew wrote, “The loss of the storage facility to Ohio’s honeybee program is catastrophically significant. Nearly one hundred years of bee equipment, antiques,

contemporary equipment, books, back issue of journals, mower, a small tractor, extractors.... Name absolutely anything to do with beekeeping equipment and it was in that barn.”

Fortunately beekeepers do have something left. The tornado did not get the Old Rothenbuhler bee lab which was untouched. However, its contents were transferred from Columbus to the storage building that was destroyed by the tornado.



At its new location in Wooster and some of the people who shared in its history.

The old OSU beeyard cottage now referred to as the Rothenbuhler cottage as it was during the final stages of it's move. In the picture above, starting on the left, Dana Stahlman, Bob Hooker, Jim Wilson, Jim Ragland and Ron Hoopes, President of OSBA. Many others volunteered time and effort in the move from Columbus to Wooster. A long way from the “Horseshoe” where it originally stood.



And the picture on the right Front row, Vic Thompson, Winston Dunham, Walter Rothenbuhler and the back row, W.A. Stevens, Larry Connor, Hobart Fulton and Jim Tew.