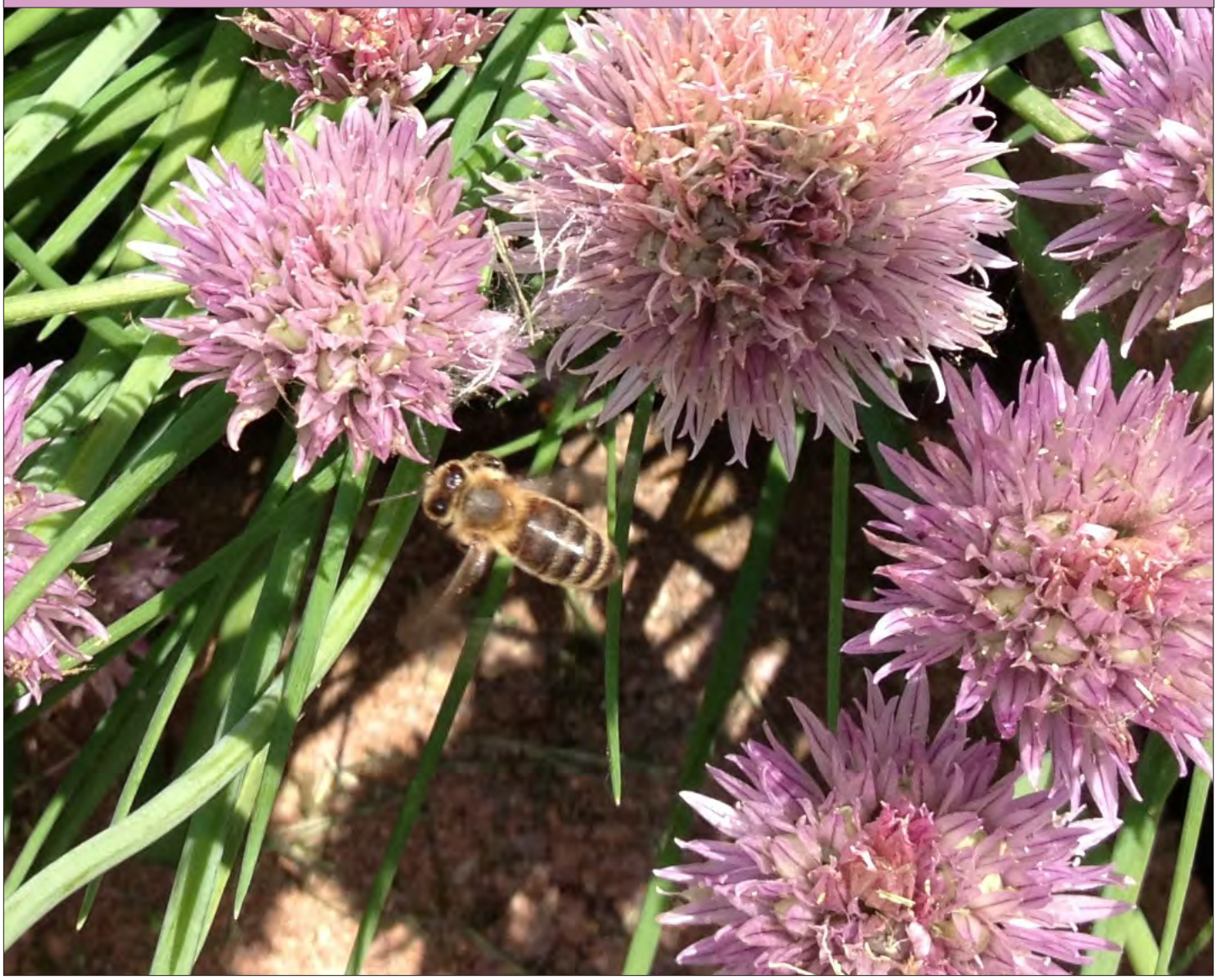
ISSUE 38 • AUGUST 2013

Kelley Bee News
Modern Beekeeping



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The Buzz

This month, I would like to talk about manufacturing at Walter T. Kelley. There have been numerous articles in the past dealing with every facet of beekeeping but never have we focused on manufacturing and the logistics that are involved to get the product to the end user. Like many organizations, we are continually reviewing our current methods and focusing on cost and quality improvements.

My name is Eric McMichael, the Director of Operations here at Kelley's. I came to the company in 2010 after spending twenty years making communications cable and office furniture. As you can probably guess, I am a well-seasoned veteran that has a lot of experience in manufacturing.

Stephanie, Vance, Doug, Steve, Roger, Eric and Johnny

We have five manufacturing departments consisting of a Wood Shop, Assembly, Metal Shop, Wax Department and Sewing Department. We also have a finished goods Warehouse and a Shipping Department. Between Manufacturing and Shipping, we have approximately 40,000 square feet under roof.

The Wood Shop has sixteen associates led by Johnny Sweet, who has fifteen years experience in the wood industry. The products produced are all of our wooden ware (hive bodies, supers, frames and accessories). All products are started with raw lumber which is Eastern White Pine purchased in the northeast USA. The lumber is processed through a gang rip saw to cut to correct width before being sent to an automated cut system to cut to correct length. The lumber is then sent to specialized machines to be processed into the finished part. The finished parts are inspected for quality and then packed before being sent to the warehouse for storage.

Assembly has three associates led by Vance Gibson, who has been with the company for five years and had previously run his own cabinet shop. Products produced by this department consist of screened bottom boards, inner covers, outer covers, assembled frames and all other products that require assembly.

The Metal Shop has five associates led by Doug Mitchell, who has been with the company for two years. Doug's background includes metal fabrication. The Metal Shop produces extractors, tanks, sumps, capping melters, and other metal goods. One of the things that make the Kelley metal shop unique is that we do custom work for our customers who require a special made product.

The Wax Department has twelve associates led by Steve Gore, who has been with the company for four years. His previous experience was in the adhesives industry. Our raw wax is purchased in lots of 40,000 pounds and is

pure 100% bees wax. The first operation is melting the wax to liquid form at 230°F. It is then processed through 32 filters before being processed into sheets before having wires embedded into the sheet for strength. The product is then packaged and sent to the warehouse for storage. There are only two major producers of wax foundation in the United States and our reputation for quality foundation in the beekeeping community is second to none.

The Sewing Department has six associates led by Stephanie Slayton, who has been with the company for five years. Her experience consists of running her own sewing business for six years. Products that are produced by the department are coveralls, jackets, veils and gloves. Most products that are produced are made on an as-needed basis to ensure the proper size and hood or veil combination is correct. The department added an embroidery machine for personalized monogramming and a surge machine for improved quality over the past two years.

The Shipping Department has seven associates and Roger Castleman is the Supervisor. Roger has been with the company for one year and has past warehouse/shipping experience. Due to improvements in the department and increased productivity; products are generally shipped within a two day window

The manufacturing team here at Walter T. Kelley understands and is focused on the customer in everything that we do. There have been many changes to products over the years that have been driven by customer input. We will continue to listen and change with the industry as we have in the past.

Eric McMichael
Director of Operations
1-800-233-2899, ext. 211

Bee Thinking About

For August, 2013

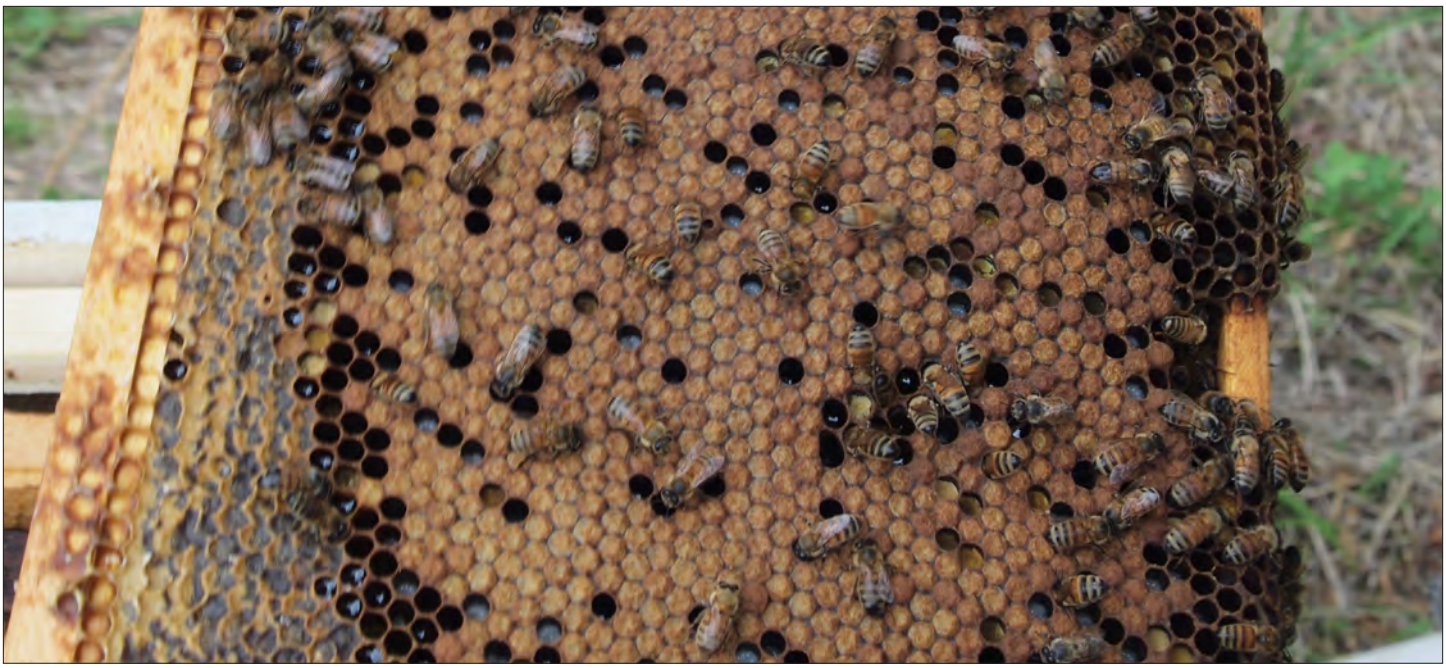
About a year ago we started this feature to remind you of things to consider for your apiary this time of year.

You'd think (and we had hoped) that we could just run last August's article again, but golly, there's so much to learn and think about, so it wasn't that easy. Plus, you ***wonderful*** *readers let us know about other things to consider, so we've expanded this article on things to bee thinking about for the August apiary.*

As always, what is appropriate for your apiary varies by your geographic area, your microclimate, and your management philosophy.

Things to consider in late summer:

Do you have a good brood pattern? Laying is slowing down, so every bee here on out will either be overwintering or nurturing the bees that overwinter. You need a good cluster size going into winter. If there isn't a good pattern, check that there's at least 20 pounds of honey in the hive. That's what it takes for the queen to keep laying; that could be the cause of a weak brood pattern. Consider supplemental feeding, requeening, or combining the hive.



A great brood pattern—the darker cappings mean the brood is older, about to hatch. The queen has gone back and filled in most empty spots with eggs, now larva. The extent of the brood pattern will diminish as winter approaches. Photo courtesy of Cleo Hogan.

About combining hives: It's about make or break time for hives in the north. In the next few months, any colonies with insufficient stores will need to be addressed. Know which hives are your good ones, which queens are performing, etc. for ease of decision making when the time comes.

About requeening: There's plenty of debate on whether you should routinely do it, or let the bees decide. There are plenty of insights and opinions on that topic.

If you do requeen, consider not killing the old queen (put her in a nuc box perhaps) until your new queen proves successful—that they've accepted her; that's she's laying and laying well.

Did your teenage son leave his gym shoes in the hive? Hopefully not, but it might smell that way. If you're blessed to live by goldenrod, this great fall forage is a honeybee favorite, although it does make the hive smell like a locker room to we humans. The honey still tastes great though, but it may be honey that you're leaving on for their winter fuel anyway. Winter. Argh. So hard to have that word on the radar again.

Mites, small hive beetles, etc.: Stay on top of them. Reducing the hive volume to something bees can most appropriately defend is crucial this time of year as populations decrease and raiders increase.

Educate: This is the time of year when a variety of wasps, yellow jackets and other stinging insects move from annoying to aggressive. You'll hear from your neighbors that one of your bees stung little Becky on the lip when she drank from her open pop can and that there's a huge honeybee nest hanging under their eves. Chances are in either case those are *not* honeybees. When you find opportunities to help people understand the differences between stinging insects and the importance of them, consider using the teachable moment to help our honeybee friends.

Food and water: Drought, natural seasonal declines in forage, etc.—if it's happening, supplement. You want the colony as strong as possible heading into fall and winter.

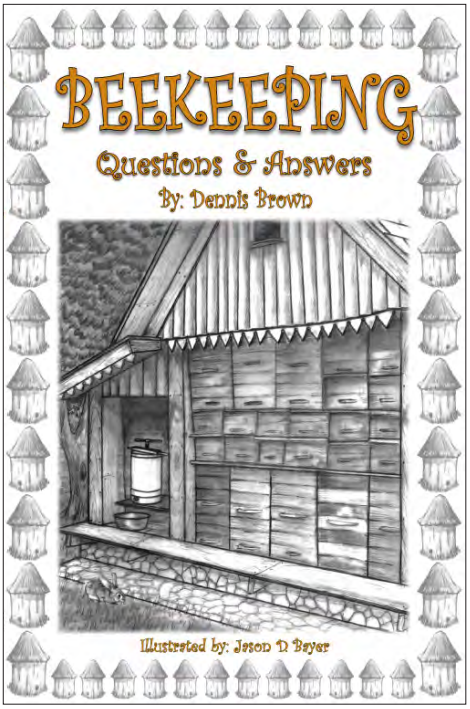
The editor's apiary, mid-summer. Those single-deep colonies are on the watch list; the "power tower," back left, is thanked every visit. There will likely be fewer hives by November as weaker hives are combined with stronger.

Take a photo of the apiary: A reader sent in this helpful hint, noting that come winter, when reviewing the year and planning for next, a picture is helpful in recalling what hives were where and maybe helping explain differences in productivity. Plus, we love your pictures (see final item).

Start thinking about fall: Gasp, but yes. When you take the supers off, do you have containers for that honey? How are you going to store the supers so they don't get moth or mouse-infested? Do you need mouse guards for the hives? Remember, Kelley's carries everything you need.

Celebrate the honey season by sending chocolate to the editor: Not really—she doesn't need it. However, she does need your pictures and stories of success to share with readers, along with pictures and stories of what went terribly wrong to help us all better keep bees. Email them to me at Editor@KelleyBees.com, and thanks in advance.

As always, your comments and contributions are welcome, email Editor@KelleyBees.com or visit kelleybees.com/blog.



Beekeeping in the South

By Dennis Brown

Editor's Note: *Dennis, of Lone Star Farms, is author of two books on our favorite insect. You may obtain both* Beekeeping: A Personal Journey *and* Beekeeping: Questions and Answers *from the Walter T. Kelley Company.*

Beekeeping is hard work and working bees in August is insane in the southern states when the temperature is 100°F or higher. But, we do it anyway. A good manager of bees understands that the bees need to be worked no matter how hot it is outside and makes sure that the bees come first.

In Texas, in August, the bees have put the tallow flow behind them and are coasting along until September rolls around when the fall nectar flow begins. At Lone Star Farms, however, we are busy storing the honey supers and cleaning up the honey house and extracting equipment. August is the month that the Southern beekeeper assesses how well he managed his/her bees for the past year. The proof is in the "honey" so to speak. If Mother Nature has provided lots of nectar resources for the bees during the honey flow and the bees were strong enough at the right time to store a good surplus for the beekeeper, then the beekeeper has been successful in his/her management skills for the past year.

It is important for the beekeeper to manage the bees all year long, not to start a month before the honey flow begins. Good beekeeping is all about timing. If you want to be successful with your bees, then you need to learn good timing for your area.

Enjoy your bees.

Good beekeeping is all about timing. If you want to be successful with your bees, then you need to learn good timing for your area.

— Dennis Brown

Questions or comments about this article? Please go to kelleybees.com/blog.

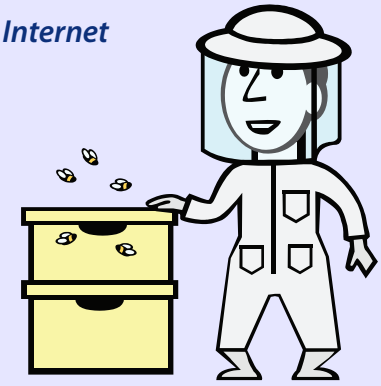
Beek Hint

Robbing can clean out a new hive literally in a matter of hours. So, I keep my hives well fed and strong during a dearth.

—Lcknutson, via the Internet

Folks, in many geographic areas, it is dearth time. Feed, feed, feed if that's part of your management philosophy.

Speaking of geography, I was also amused when someone asked, "What is a beek?" Well, it's a common term for "beekeeper" where I'm from, but not-so-common elsewhere. Since then, I've also heard that it's the nickname for we bee geeks.



Healthy Bees

Wax Moth Destruction

The opportunistic wax moth is waiting for honeybees to have more hive than they can patrol, common this time of year. They also treasure abandoned hives, where they may spin what is perhaps paradise to them, but a horrific mess for us.

Last fall, Ursula D. wrote us to say "I do love to get the bee report from you very much, would it be possible to tell us a bit about WAX MOTH and what can be done, also what to look for?"

We've covered dealing with these destructive critters in previous issues[1]. But, pictures are worth thousands of words, and we're VERY appreciative to regular contributor Vlastic, of Oregon, for photos that illustrate the issue. Vlastic noted that the photos are "from two abandoned hives, one long empty and the other maybe had some new comb built in the spring before they gave up and left (or died, not sure). Hope my bee hives will never look like this." (See images below.)

Mite-Away Quick Strips,
Catalog # 421Q

We hope so as well!

Vlastic also offered: "the formic acid medicine against red mites seems to work well, it would take out 10% of hive bees but those were likely already infected and just bled to death when the mite died and fell off."

Readers, thanks for both letting us know how we may better help you help bees, and for using us to help others with your questions, answers, stories and photos.

While we love the success stories, photos and stories of things-gone-wrong are also helpful. All are welcomed. Please email them to Editor@KelleyBees.com. Thanks.

1 Check out our index, available at www.kelleybees.com.

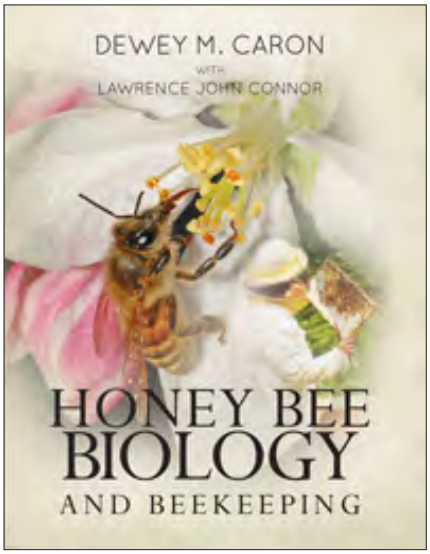
Questions or comments about this article? Please go to kelleybees.com/blog.

Reading Brood Frames?

By Dr. Dewey M. Caron

Editor's Note: *The updated edition of Dr. Caron's book,* Honey Bee Biology & Beekeeping*, is now carried by Kelley's. This edition is in full color and has all the newest information in it. It is unique in that it extensively covers both the biology and the beekeeping for those "students" of the honeybee. Dr. Caron noted "Individuals constantly tell me they return again and again to the book to re-read it and find they can get the information they need on bees and/or their biology from the one source."*

At Kelley's Field Day, I did a workshop on READING BROOD FRAMES. This is a good workshop that works as a great educational activity for a bee meeting talk or for an Open Hive event. It is designed to introduce the concept that we should ask what the bees are trying to communicate to us when we enter their brood chamber, by "reading" the brood frame.



The latest edition, available from Kelley's.

It is important for beekeepers to create as little disturbance as possible when opening and inspecting hives. Every time we open the colony, we disrupt their normal routine (think of someone bursting into your house, moving the furniture around, bringing full sunlight and a stinky smoker—you would be "disturbed" too). Such disturbance often carries over to another day depending upon the weather conditions when we open and how long we have the colony open. Good bee stewardship should seek to create as little disturbance as possible while we seek to figure out what the bees are doing.

We get our information by "reading the frame" every time we pull a frame from the brood chamber. Frame reading takes experience and skill. When in the brood chamber we should determine if the colony is queenright, if the brood is healthy, and assess if the colony is expanding (spring,) stabilized (summer) or contracting (later fall/winter) in brood/adult populations, as appropriate. A practiced reading means determining what the bees are communicating to us.

Sometimes we can "read" the colony by inspecting two or three frames—some colonies take longer and we need to inspect additional frames to find our answers. Seldom do we need to look on every frame in every box. Experience will improve this reading skill. Knowing where and of course what to look for is the skill we should refine.

In our routine brood chamber inspections we seek to determine if our colony is "QUEENRIGHT"—not by spending time looking for the queen but rather by seeing normal egg laying. Eggs and their "normal" positioning "tell" us a queen was in this colony within the last three days. (Review the last Newsletter for a summary of what I say about our "need" to see the queen, in A-Bee-Cs page 21.)

Looking at capped brood we should evaluate the extent of the pattern, the completeness, and if the capped cells look normal. We need to know "normal" so we can diagnose abnormal. We should recognize the larger drone cells, where the queen must lay unfertilized eggs. We cannot tell the difference between fertilized and unfertilized eggs but bees sure do!

Good bee stewardship should seek to create as little disturbance as possible while we seek to figure out what the bees are doing.

Looking at larvae we can diagnose the early symptoms of colony decline. Spotty brood patterns are often the first clue and then on closer examination we can see unhealthy larvae. In addition to pattern and extent of "open" cells, we should look for off-color, twisted larvae. Sometimes an off-odor can be detected, even upon opening a colony.

Skillful beekeepers look to see a ratio of 1:2:4 in the brood chamber (for every egg, 2 larvae can be seen and 4 times the number of capped cells will be present) and a covering mantle of adult bees. Such a "read" takes skill and practice. With CCD and heavy mite damage, this ratio and the coverage of adult workers is not properly balanced. Neglect of brood may be evident, especially at the margins of the spherically-shaped brood chamber. Some cappings may be perforated (an AFB symptom) but hopefully inside, a developing adult will be found rather than a broken down, foul-smelling larva or prepupa.

Determining whether a bee colony is increasing versus decreasing in population is not always an easy read. Also determining the amount of honey and pollen present as appropriate for the season takes practice in evaluation. Most commercial operations equalize colonies so all the units on a pallet are more or less the same in strength. If diseased brood is present, this management unfortunately serves to spread the disease condition, not contain it.

The brood is trying to "tell" us something, but are we prepared to "read" the brood to find "answers"? Here is how you can give a workshop to help with this skill.

The Workshop Concept

In an Open Hive event, pull out a brood frame and ask individuals to point out capped brood, capped honey, ask if drone cells/capped drone cells are present, ask if eggs are present, and ask if pollen is present and if they see queen cells or cups. In an inside meeting do the same with a frame projected onto the screen; add the initials after someone in audience points out the location to be sure everyone "reads" the same thing.

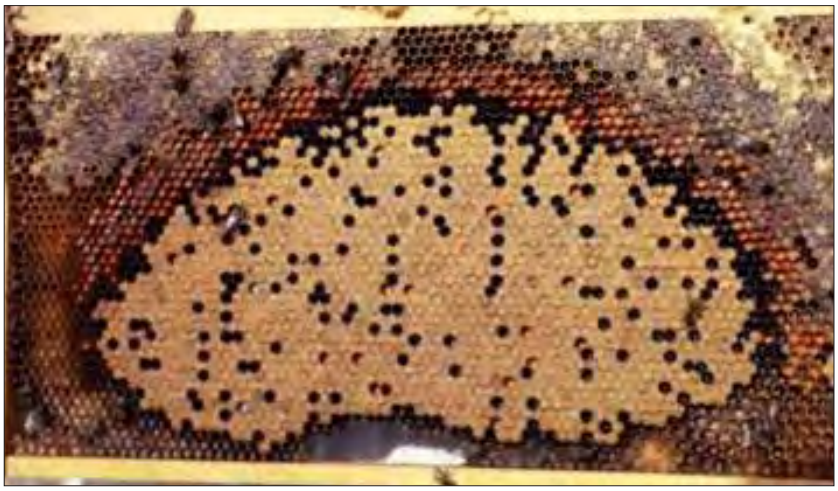


Photo courtesy of Dr. Dewey Caron.

Here is such a frame. Mark capped brood (CB), capped honey (H), pollen (P), eggs (or where to look for them) (E), drone cells/brood (D), queen cells/cups (QC), and finally any signs of brood disease. It will of course be hard to see eggs (even in Open Hive workshop) and there may be no drone brood, pollen (if frame is full of capped brood for example), or queen cells—queen cups might be more commonly present.

The "Reading the Frame" Quiz

I then go through five options to which I ask for YES, NO or MAYBE response (have them all shout it out or call upon individuals) for eggs, pollen and drone cells and/or queen cells/cups (whichever might be appropriate).

What if there are NO EGGS present on this one frame? Does that mean...

- no queen present
- new virgin/newly mated queen present—not laying eggs yet
- look on another frame—this one filled with cells of mostly capped brood
- end of season or drought conditions or pollen resources no longer available
- bees preparing to abscond (or swarm)

What if no pollen evident (on this one frame)? Does that mean...

- no young brood to stimulate pollen foraging
- numbers of cells filled with fresh nectar
- no space—look on another frame especially frame at edge of brood sphere
- pollen dearth or drought or heat spell
- bees preparing to abscond (or swarm)

(NOTE: There are no YES or NO answers; all are MAYBE, but the most likely answer is the middle one.)

What if there is no drone brood (or queen cells) on any frames? Does that mean...

- end of foraging season
- pollen dearth or drought or heat spell
- look on another frame—no space here
- look again at margins of frames and at comb between boxes
- not rearing queens (cup presence OK) because _____

Beekeeping is not rocket science; we don't have to get it perfectly right.

(NOTE: all answers are possible—depending upon frame, middle answer is again the best one.)

Finish after this exercise by asking is the colony queenright? This will get into discussion "Do you need to see the queen?" See the July, 2013 Kelley newsletter (page 21) for some pointers on how to handle this discussion.

I usually summarize the discussion by saying NO—seeing eggs is easier and gives just as much information unless we are re-queening/splitting or need to confirm continuation of special stock. Beekeeping is not rocket science; we don't have to get it perfectly right. It takes time and skill to find a queen and routinely looking for her usually results in unnecessarily long hive openings, potentially causing greater colony disturbance.

And finally, if time permits, ask (on basis of this one side of one frame): "Is the brood healthy?" ANOTHER good finish would be to ask "Is this amount of brood and honey/pollen stores appropriate for the season?" You will need good beekeeping skills to help lead such discussions. Be mindful that some individuals will have different opinions.

"Reading the frame" is a fun and educational exercise. Try it with your family, friend or club members. This exercise will definitely help you to learn as you teach others!

Questions or comments about this article? Please go to kelleybees.com/blog.

A deep body overflowing with bees is wonderful to find.

Bee-Havior

Honeybee Pheromones

By Ol' Drone

Honeybees communicate by issuing strong smelling chemical compounds called pheromones. These fragrances direct specific behaviors and their uses are important in the normal function of a healthy honeybee colony. There are dozens of types of pheromones which are produced by queens, workers, brood larva, drones, and even guard bees when they sting. The stinger that is left in your skin gives off a scent that attracts other stinging bees to guide them to, follow, and continue to harass the victim (or predator). One important scent called the "queen mandibular pheromone" (QMP) is generated by the queen and it is constantly distributed throughout the entire colony by nurse bees who stroke and lick the queen. Other worker bees transfer the scent to all the thousands of hive bees and this sends a signal that "all is well" in the colony and that a healthy, productive queen is properly functioning in the hive. The QMP also sends a signal to the workers that inhibits their ovaries from developing as long as the "one and only" queen is presently performing the egg-laying in the hive.

Photo by Edward Karle.

If the queen dies suddenly, the bees can produce a new queen by creating a new queen cell built around a just hatched larva. If no young larvae are available, the lack of QMP to distribute throughout the colony will trigger development of the ovaries in several ordinary worker bees who will now lay only unfertilized drone eggs. This action by the laying workers will result in loss of the colony. Substitute QMP has been synthesized and is available to use to temporarily act as if there is a queen present. This continues to inhibit laying workers while a new queen is ordered and installed.

Another scent called the Nasonov pheromone is produced by the workers. This scent is obvious whenever a hive is opened for inspection. Bees will be observed with their abdomens raised and with wings fanning a breeze to distribute the scent. This is an alarm pheromone alerting the colony that there is a threat and preparing them for defense. The faint fragrance of lemons can be detected in the air and the bees can easily be calmed down by a few whiffs of smoke from the smoker. Bees often use this same scent at the hive entrance to help guide their family bees back to their home. This pheromone is also available as a synthesized compound and is valuable to attract swarming bees to a "catcher hive" box. Beekeepers often set up empty catcher hive boxes nearby the bee yard hoping to attract a wild swarm or one from their own managed hives.

Honeybees communicate continuously through the use of these amazing pheromones and research is still uncovering the secrets of their usage.

Questions or comments about this article? Please go to kelleybees.com/blog.

Great Sunflower Project

The Great Sunflower Project Expands Scope to Determine Best Plants for Supporting Pollinators—Great Bee Count on August 17

San Francisco State University News Release

The Great Sunflower Project is moving beyond the backyard this summer. The popular project is encouraging its corps of more than 100,000 volunteers to observe bees and any other pollinators they see, on all kinds of plants and in all kinds of places. Participants can now report their bee counts from a walk on a nature trail, a thorough search of a local park, or even a casual encounter with a bumblebee flying by.

To join The Great Sunflower Project, visit the website at http://www.greatsunflower.org or follow the project on Twitter or Facebook.

"We've opened up the project to new ways of sampling pollination," said San Francisco State Professor of Biology Gretchen LeBuhn, who started the project six years ago. She said the new sampling methods were driven in part by the data already collected and in part by requests from the citizen scientists.

The project's data are beginning to reveal how pollination happens in gardens, and people can check to see how well backyards in their state stack up against others, when it comes to bee visits per hour. "But one of the things we realized as we've been analyzing our data is that we can't speak to what's happening in natural areas," LeBuhn said. The new sampling can help fill in the blanks, she explained, in wild environments such as desert, chaparral and coastal habitats.

"If people can tell us where they were when they observed the bees, we can convert that into latitude and longitude information and start to build up some information about which natural habitats are doing well and poorly" in terms of pollination, LeBuhn said.

If anyone has every asked, "Why are you so passionate about bees?" show them the photos from this site and the impact bees (and other pollinators) have on the produce section of a typical grocery store.

The new sampling also moves beyond sunflower observations to help the scientists determine how well certain plants do at supporting pollinators. LeBuhn says there is a lot of anecdotal evidence about this, but surprisingly little research.

"A lot of people came to us and said, 'now I know that I have three bees per hour in my garden, so what should I do next?'" LeBuhn said. To answer this question, her team began a habitat assessment project this year to discover what kinds of plants and other garden features—from water to mulching—could improve the habitat for pollinators. "Once we started doing this," she explained, "we realized how little data we have on what the key plants are."

LeBuhn hopes to have a set of habitat assessment tools online next year, but she suggests that people collect data on their backyard pollinators and plants now, so that they can be ready to make changes that bring in more bees.

The Great Sunflower Project will hold its annual Great Bee Count on August 17 to encourage users to upload their observations. The project's data has been requested by federal agencies, classrooms, and the Weather Underground forecast website. "My biggest dream is to have the data used as many times and in as many ways as possible," LeBuhn said.

Through the participation of over 100,000 citizen scientists the Great Sunflower Project aims to collect information about the whereabouts and activities of pollinating bees, and to provide those bees with more pollen resources. To join The Great Sunflower Project, visit the website at http://www.greatsunflower.org or follow the project on Twitter or Facebook. If anyone has every asked, "Why are you so passionate about bees?" show them the photos from this site and the impact bees (and other pollinators) have on the produce section of a typical grocery store.

Questions or comments about this article? Please go to kelleybees.com/blog.

Bee-Yond & Bee-Hind the Hives

Abandoned Bee Hives (Part 3)

Management Plan and Progress thru July

By Dana Stahlman
Master Beekeeper, Author, and retired OSBA President

Editor's Note: *This is the third installation[1] in Dana Stahlman's account of analyzing a surviving colony found in an abandoned bee yard. Dana's experience and informative pictures make for interesting and instructive reading. Thanks Dana!*

If you have read and followed this story from the beginning, some issues have been resolved with the progress of the hive and their queen. The bees were transferred, and the traits of the bees justify producing some daughter queens for future evaluation. I would like to add that it is important for all beekeepers to evaluate honeybees for the ability to survive winter, and share outstanding stock with friends and club members willing to do the same.

The management plan for this queen required clipping a wing and marking her. These accomplished two things: it would be easier to find her in the hive when I inspected it and second, it would prevent her from leaving with a swarm.

All photos courtesy of Dana Stahlman.

This is a picture of the hive in April just after the transfer. In the background is the equipment that was discarded, and over the hill beyond my property, the woods from which this hive was recovered. The abandoned hive equipment was burned.

The management plan was to replace the old comb with new and save as much brood as possible. I am convinced that beekeepers with old dark comb in hives have a harder time controlling disease than those who have newer comb. This was confirmed with an inspection of my bee hives by the state bee inspector on July 1, 2013.

1 Earlier installments are available at www.kelleybees.com.

In early May, I gradually began replacing the old frames with new foundation. The schedule was to replace one old frame each week. The old frames contained brood I wanted to save and thus I put an old frame into a nucleus hive I used for raising a queen each week. The idea was to remove these old brood frames from the nucleus hives as soon as the bees all emerged from their cells and before a new queen started laying eggs in the nucleus hive.

Thus, I can report that this one hive of bees (abandoned and surviving for a period of time without any human action to manage them) is surviving, thriving and doing well.

That was the plan, but as you know, sometimes we just don't follow through completely. By July 1, I had not removed several of the old frames from my nucleus hives raising queens from the abandoned hive queen. The bee inspector found chalkbrood in two of these small hives containing the old brood frames. At the time the frames were removed from the abandoned hive, I did not see any chalkbrood. By the time the new queens were laying eggs in the old frames and the state inspection was taking place, chalkbrood was present. Note: the nucleus hives were made by taking bees from other hives I own, and not from the abandoned hive. No chalkbrood was found in the abandoned hive of bees or any other hive I had. I am looking forward to the evaluation of the comb and bees taken from my hives by the state inspector. The bee inspector took samples of bees as well as small sections of comb with larva to be sent to the Beltsville, Maryland lab for analysis. This I understand will include a check for viruses as well.

Thus, the old comb is now all removed and hopefully with it—the chalkbrood. No mites were observed and I was rather pleased with comments made by the inspector. I am now waiting for the report from Beltsville regarding the bee and comb samples taken.

I have had an interest in raising queens and things have gone well with this hive. I have produced a few daughter queens for future evaluation and have tried to pass the genetics to other beekeepers who have an interest in raising better queen stock for evaluation. I invited a few students from a queen class taught this spring to graft larva from this queen to raise additional queen stock. So far, stock from this queen is being evaluated. I have no idea of the success or failure of these daughter queens. Hopefully, the individuals evaluating this queen stock will follow through giving me feedback on how well the stock does.

Thus, I can report that this one hive of bees (abandoned and surviving for a period of time without any human action to manage them) is surviving, thriving and doing well. Current evaluations indicate the bees are gentle, have been able to clean up chalkbrood, seem to be active earlier in the morning than other hives, overwintered with a good population of bees and continue to build up into a productive hive, and—depending on inspection reports from the USDA Beltsville Lab—are free of disease. I have done nothing regarding treatment for mites or provided supplemental feeding to help them build up faster.

Shown here is Don Crock grafting some larva to take home.

The only way to truly evaluate this queen from the abandoned hive or any other queen is to have a number of daughter queens spread out among a number of individuals willing to add their own observations and evaluation.

Special notice: I am a retired queen breeder and no longer sell any queens. However, I am willing to share any genetic material from this hive as long as a person or group is willing to arrange a visit to graft and use their own equipment, supplies, etc. to produce a few queens for research and evaluation. Email me, and please put "Kelley Newsletter request for grafting" in the subject line. Requests may be limited based on the response. There is no charge or fee to anyone grafting from this queen.

Questions or comments about this article? Please go to kelleybees.com/blog.

Making Beeswax Candles

By Virginia Webb, Master Beekeeper, www.Facebook.com/MtnHoney

After honey, the next most common by-product of the beehive is beeswax. Candles made from beeswax are some of the highest quality available. 100% beeswax candles are long burning, have their own natural honey aroma and are a perfect gift item, especially for individuals who may have asthma or allergies due to artificially scented candles.

Here is a list of items needed to begin making beeswax candles:

- Candle mold and wick
- Rubber bands
- Double boiler and tin can—this can be a large pot, designated for melting beeswax
- Mold release spray
- Straining material—nylon or other materials
- Container to strain wax
- Small level
- Wick holder, pin or hair pin to hold wick
- First rendered beeswax—capping wax is the best

Candle Making Kit, Catalog # 499

To get started making beeswax candles you will need candle molds. Molds can be made of tin, plastic or silicone (or flex). For my operation, I use mostly the silicone molds because they are flexible, easy to remove the candle, and should last for hundreds of pourings.

Shown here are variety of candle making molds.

Clear Beehive Mold, Catalog # 486 (upper left), Round Candle Molds, Catalog # 494 (upper right), and Polyurethane Taper Mold, Catalog # 487 (left).

Use only cotton wick. If pouring votives you may want to buy pre-clipped wicks, this is safer for burning. When you buy the candle mold it should state the correct size of wick to use. If you use too small a wick, the candle

Standard Votive Wick Assembly, Catalog # 491

will burn a small flame and may go out prematurely. If the wick is too large, the flame will be too big and the candle will drip.

In first melting beeswax, I only use a double boiler to melt the wax. Use an old four (4) quart pan or larger for water, and a smaller pan or tin can for the wax. This allows the wax to melt slowly and evenly. Wax that is overheated will be dull and can darken in color.

Using wax that has been once-rendered may have some debris on the bottom. When melting the wax I never stir the pot, because wax is very light and any foreign matter in the wax will sink to the bottom of the pot. When I strain the wax, I will never completely pour out all the melted wax, just pour to the point where the "slum gum" starts. This slum gum wax is poured into another container and used for non-craft items.

Set up the candle mold, making sure the top of the mold (which is the bottom of the candle) is level. By using the small level you will ensure the candle is level. If the candle is not level it will drip. You may want to place the mold on a form, to elevate the mold so not to have the wick making the candle set uneven. Place a few rubber bands around the candle if it is a split candle mold. Use a wick holder, pin or hair pin to hold the wick in place. Make sure it is centered in the mold.

To strain the wax I use a one liter soda bottle. The reason I prefer this size is that it holds a little over a pound of wax and it is transparent. You can easily see the amount of wax you are pouring into the container and it is also reusable. After you pour the candle, pour the remaining unused wax back into the melting pot. A thin layer of wax will build up inside the bottle. After several pours, refrigerate the bottle to let the wax harden. After it hardens, place it back into the melting pot.

Over the years I've heard of many different items used as straining materials, such as paint strainers, panty hose, and old t-shirts. I've tried most of these, but in recent years, I started using older sheer nylon curtains. Cut to about a 1-foot square, they can be folded to make two layers for straining. These can be easily found at resale shops for only a few dollars.

When you are ready to pour be sure to secure the strainer with a rubber band, this will keep the strainer from falling into the wax.

If using a metal, glass, or hard plastic mold, you will want to spray the mold with a mold release spray, which is 3% silicone. I don't suggest using vegetable oil for it can bond with the wax. The silicone spray creates a barrier between the wax and the mold, making the candle easier to release.

Pour the candle evenly; don't stop in the middle to see if it is being filled. This will cause lines around the candle where the wax has started to harden.

If a candle mold is very detailed, you may want to remove the rubber bands and loosen the candle from the mold after it begins to set up. This can be done within 15-20 minutes of pouring the candle.

Wait until the candle is completely hardened to remove. If you take the candle out before it is hard, the wick could pull through the candle.

For more details on pouring candles, I've made a YouTube.com movie on Preparing Honey Show Entries – Beeswax Candles. It will show you the step-by-step process I use in pouring candles.

Good luck with all your beeswax items.

Questions or comments about this article? Please go to kelleybees.com/blog.

The Pollen Hive Product, An Overview (Part 2)

By Harrison Overholt

Editor's Note: *Marking his 19th season in the apiary, Harrison Overholt is a member of the Allen County (KY) Beekeepers. He manages about 35 hives for pollination, honey/pollen production, in south central Kentucky.*

His inspiration for beekeeping began after the sudden death of his cousin, beekeeper J. R. Epley, as well as consideration for replacement of farm income from the tobacco income loss. He holds membership in the Kentucky State Beekeepers Association and the Tennessee Beekeepers Association.

Last month we carried part 1 of this article, covering such things as collecting, drying, cleaning and storing. You may obtain that article, and all previous articles, from www.kelleybees.com.

Photo courtesy of Charlotte Hubbard.

Packaging

Package pollen according to your market requests. Product labeling regulations vary from state to state somewhat. Here in Kentucky the label is to contain the name of the product, your name / logo, a way for the consumer to contact you such as an address, phone, email, and the weight listed in grams and ounces.

Some consumers may want the drying stage of pollen bypassed, feeling pollen is a healthier product without the drying. In this case, be sure to keep the pollen refrigerated, as the moisture level will cause mold on the room temperature shelf of the retail outlet.

Finding Markets

The pollen market may be a little more evasive than for honey, as everyone may not understand what pollen is for. A possible outlet is your area nutrition store; they carry bee pollen and may not have a local source from which to acquire it. Working with small businesses can be very rewarding and their consumers are usually glad to know the producer is local.

When you are a partner with the retail outlet, be sure to be aware of the shelf space you are allotted. They make money with stocked shelves, and will not tolerate a long absence in inventory. Small businesses will understand a seasonal inventory and if you communicate with them about the time of availability, they will be some of your best life friends.

Any marketing will always enhance your product. Here in Kentucky we have the "Kentucky Proud" program signifying local processing and/or grown. If you are not inclined to partner in the retail arena, there is a demand for wholesale pollen in quantity, such as for the racehorse industry, but the price will be lower. Also check the bee industry magazines for ads on purchasing pollen.

Pollen Production

An often-asked question is: how much pollen can a beehive produce and remain healthy?

Of course, it will depend upon the time of year, as rainfall and temperature affect the plant life and their reproduction schedule. The age of the queen and bees, as well as the volume of harvest bees will also govern the amount of need and capabilities of foraging plants for pollen.

This question is a great way for a drone to buzz around and you will wonder what is the answer. I previewed my 2012 product and can suggest some idea. I like the two hive body management within my operation; this is also the size of pollination hives I contract. Last year, eight pollination hives returned from watermelon in early July, and these hives were not in honey production. They were good, strong hives with healthy young queens.

In Kentucky, temperatures and moisture in July and August affect plants, animals, and man, and not always for great productivity, yet life must go on.

Between July 18th and July 30th, at three different locations within one mile of each other, I installed these eight hives with the bottom traps for pollen collection. The traps remained in collection until October 13th, and produced a little over 100 pounds of pollen during this period. A note: when a killing frost happens, the pollen harvest ends that day.

I hope this will intrigue a little of your beekeeping adventure skills and management of your girls will be a sweet and successful venture.

Questions or comments about this article? Please go to kelleybees.com/blog.

Brenda Mergen, with the hive her grandson crafted just for her. Photo by Carolyn Fink.

New York Kelley's Dealer: "We're Here, We Love It, Come On In!"

Now that's she's grown up, Kimberly gets to get closer to bees! Photo courtesy of Hungry Bear Farms.

The back room at Hungry Bear Farms, full of Kelley's products ready for you. Photo courtesy of Hungry Bear Farms.

Just some of the honey varieties. Photo courtesy of Hungry Bear Farms.

When Kimberly Carpenter was a little girl, she'd peek around the corner of the barn to watch her grandmother tend bees. Kimberly always wanted to get closer, but Grandma wouldn't allow it. She would however share in another joy of beekeeping—fresh honey still in the comb.

Those delicious memories, and the mystery of the hives, stayed with Kimberly. When, as an adult, she spied a beginner beekeeping class, she quickly signed up. She wanted to find out why beekeeping had been so important to her grandmother.

The rest is history. From two hives the first year to well over 100 now, and with a full plate of beekeeping, bee promoting and beekeeping supplies on a booming hobby farm, Kimberly is as busy as a bee. "You can never have just one hive," she noted.

Hungry Bear Farms, hungrybearfarms.com, has been a Kelley's dealer for a few years now, an easy decision for them. "All the old timers recommended Kelley's to us," Kimberly said. "We love being able to offer our customers such a comprehensive line of quality products."

Located at 699 South Main Street, in Canandaigua, New York, the store sells beekeeping supplies along with seasonal eggs, local produce, maple syrup and of course, honey—cut comb, honey straws, creamed, raw, etc. Bees are their passion, so they also offer beekeeping classes and beekeeping mentoring services—from site consultations to make sure everything is looking good, to even caring for your hives when you are not able.

Comb honey, a childhood favorite of Kimberly's, is another reason they are a Kelley's dealer. "The basswood boxes for comb honey!" She answered when asked about her favorite Kelley's products.

Comb Honey Kit, Catalog # 22-Kit

Top Bar Hive, Catalog # 357

Kimberly also raves about Kelley's top bar hive (TBH). Hungry Bear Farms proudly keeps bees all naturally, and many of their customers are thrilled with the TBH because it seems a more holistic way to manage bees.

The Walter T. Kelley Company may be in Clarkson, Kentucky, but there's a dealer in New York, happy to be the source for the reputable beekeeping supplies it manufactures. We encourage you to stop by Hungry Bear Farms if you're in the area.

Questions or comments about this article? Please go to kelleybees.com/blog.

Upcoming Events

AUGUST 2013 EVENTS

Eastern Apicultural Society
August 5-9
EAS will be held at the West Chester University,
West Chester, PA
http://www.easternapiculture.org/conferences/eas-2013.html

North Alabama Beekeeping Symposium
August 10
Calhoun Community College in Tanner, Al
http://www.alabamabeekeepers.com/documents/NABS%20fall%20symposium/NABSyposium%20Main%20Page%202013..htm

South Florida Bee College
August 16-17
This event will be hosted by HBREL at the
University of Florida
Walter T. Kelley will not be attending this event.
http://entnemdept.ufl.edu/honeybee/extension/SFbee_college.shtml

SEPTEMBER 2013 EVENTS

Arkansas State Beekeepers Fall Meeting
September 20-21
Ozark Folk Center State Park in Mountain View, AR
http://arbeekeepers.org/events.html

Georgia State Beekeepers Fall Meeting
September 20-21
Gwinnett Environmental & Heritage Center in Buford, GA
http://www.gabeekeeping.com/events.html

Tennessee State Beekeepers Fall Meeting
September 27-28
Hyder-Burks Ag Pavillion in Cookville, TN
http://www.tnbeekeepers.org/2013-tba-conference/

Alabama Beekeepers Association Annual Meeting
September 27-28
Taylor Road Baptist Church in Montgomery, AL
More details to come.

OCTOBER 2013 EVENTS

2013 WAS Conference
October 16-19
Santa Fe, NM
More details to come.
http://ucanr.edu/sites/was2/Conference_Information/

Michigan Beekeepers Association Fall Meeting
October 25-26
Flint Gateway Holiday Inn
More details to come.

We'd love to share news of your upcoming events.

Please send the event name, date, website and/or contact information to me by the 10th of each month for inclusion in the following month's issue. Editor@KelleyBees.com

You can save shipping costs by meeting us at industry meetings.

We note on our website which meetings we'll be attending, and we'd love to meet you there to hand-off your equipment.

A-Bee-Cs

Sting Treatment and Considerations

By Camilla Bee, Editor

In our last issue, we asked readers to share their experiences with stings. Unfortunately, they are a part of beekeeping, seemingly no matter how careful or well-clothed someone might be. New-bees seem especially prone to stings, so we're running this article in our A-Bee-Cs section. We "old-bees" have likely already figured it out based on too much experience!

With most colonies at about peak populations, and with plenty of stores to protect, this is a time of year when stinging is perhaps a bit more common.

We'll be featuring more of what readers shared in future issues, and as always, welcome your emails at any time[1]. For this issue, we've pulled some of the emails on treating stings.

Respondees shared a variety of treatments, although there is one common piece of advice. First, get the stinger out as quickly as possible, because it continues to pump venom while imbedded in the skin, even if the honeybee has left.

When removing the stinger, *scrape* it out, like with a hive tool or, um, the credit card you happen to carry in your bee suit pocket. Pinching the stinger releases more venom; scraping does not.

The Reaction

A person's reaction to a sting depends on things like how their body handles it, how imbedded the stinger was and for how long, and the age of the bee. A "normal" reaction will cause some initial specific pain, followed by inflammation and often, a burning sensation. As Scott S. shared, "it feels like someone is grinding out a cigarette on me, except the cigarette doesn't go out for a long time!"

And then, there are the "abnormal" reactions, like the folks who get stung and don't even notice (yes, I've seen it!)

"Abnormal" also includes the small segment of the population that reacts severely. Because that reaction may be fatal for these folks, beekeepers should know the signs and watch for them. Signs that warrant calling 911 include[2]:

- Trouble breathing
- Feelings of fainting or dizziness
- Hives
- A swollen tongue
- History of a severe allergic reaction

Severe Reactions

If the person has a history of severe allergic reactions (anaphylaxis), they should carry an epinephrine pen and use it (or have it used on them) immediately. We recommend all beekeepers understand this reaction possibility. Internet sites such as WebMD and MayoClinic provide excellent insights.

Photo from www.epipen.com.

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1 Please email me at Editor@kelleybees.com.

2 www.webmd.com

Iris, my wife, was off to a neighbor's very strong hive (with permission) to borrow a frame for an observation hive to take to a bee talk. Running late, she didn't smoke, got into the hive but found the middle bodies too heavy to lift. Hurrying home to get some lifting assistance, she left the hive unassembled.

Throwing on my suit in the car during the 1/2 mile ride back to the now unhappy hive, I made the critical error of zipping my hood before zipping the overall front.

In short order, I got her demo frame of bees and brood and reassembled the hive, but in even shorter order, the angry ladies found the dime-sized hole under my chin between the suit's two zippers and made their way into my hood. I counted seven stings while carrying the observation frame to the car.

— David P. Daugherty

What Do Readers Recommend?

The use of Benadryl® was a consistent recommendation, and ice and cold compresses are helpful if inflammation becomes uncomfortable.

Other advice:

"My sister told me something in deodorant helps lessen the inflammation. Of course, having taken about 20 stings in two years I might be getting used to them, but deodorant on the last half dozen has seemed to help. I rub it on the sting almost immediately." *–M. B., Indiana*

Stops the Sting, Catalog # 396


Would you buy a used car from this man? How about a used bag of peas? Photo courtesy of David.

"When I do get a sting I usually put on either Benadryl® or hydrocortisone cream. This seems to help dull the itch and burn. Only in that bad reaction did I take 50 mg of Benadryl® every six hours for two days.

Just FYI your ear is mostly cartilage and if the stinger gets into the cartilage, there is not a heavy enough blood supply to this type of tissue to get the toxins out quickly, hence two days of Benadryl®." *–Brad S., MO*

"I swear by 'Stops the Sting.'" *–ReBecca, IL*

David D. shared his unfortunate story (above, in blue box), along with his treatment approach. "I drank my dose of Benadryl® and as a precaution sat with a bag of frozen peas on my face while the neighbors monitored me for any further sting reaction. Good news–I had a nice visit with friends while Iris did her talk, but it was not a pretty sight." (See his photo, lower left.)

"I try various sting remedies and have never found one so good that I stick with it." *–Andrew M.*

Julian suggested a bleach pen, available in the laundry aisle, noting that a drop on the sting area neutralizes the venom.

"Nothing I have found reduces the several days of swelling I experience with single stings." *–C. Dunlap*

Questions or comments about this article?
Please go to kelleybees.com/blog.

Recipe

Janine Waschle, at home both in the kitchen and the apiary, shared some of her favorite honey recipes at our recent Field Day. A food researcher and recipe developer, Janine focuses on creating recipes for today's kitchen, often from historic recipes. She's also a competitive cook, and winner of contests sponsored by Lawry's, Hidden Valley, and Martha White. You may recognize the name as she was the Kentucky representative for a national chicken cooking competition that aired on the Food Network, or from her bi-weekly segments on Louisville's FOX affiliate. Watch for more of her recipes in future issues.

Sweet Potato Slaw with Honey-Lime Dressing

Serves: 6-8

Ingredients:

2 large sweet potatoes, peeled
2 cups grated red cabbage
½ tsp. sea salt
⅛ tsp. black pepper
1 bunch scallions, white and light green parts only
½ cup chopped fresh cilantro
1 large lime
1 tbsp. honey
1 fresh hot chile, seeded, optional
Fruit add-ins:
1 cup chopped fresh pineapple, optional
1 chopped fresh mango, optional
1 cup chopped fresh papaya, optional
½ cup unsweetened coconut shreds, optional

Directions:

Grate the sweet potatoes on a box grater using the large holes. Place shreds in a colander and rinse under hot tap water. Fill a bowl with cold water and place colander with shreds into the bowl for 10 minutes. Remove colander and shreds from water. Discard water. Repeat one more time. This removes excess starchiness.

Place rinsed shreds in a large bowl. Add cabbage, salt, pepper, scallions, and cilantro. Zest lime over top. Place lime on a cutting board and cut off ends. Using a sharp knife, cut off pith as if removing skin from a melon. Chop lime into small bits and stir together with honey in a small bowl. Add to big bowl and toss to combine. Add a little heat with the fresh chile if desired. Add optional fruit all or none according to taste.

Chill and serve. Refrigerate leftovers.

NOTE: *If preparing ahead of time, make the salad in advance but make the dressing right before serving. Limes taste best at the moment of serving. When left overnight whether the fresh pulp or juice, they take on an odd bitter taste.*

Thank you, Janine Waschle, for sharing your recipes with us!

FAQs

Editor's Note: *Because if you ask ten beekeepers the same question, you may get at least ten different answers, we're sometimes walking on controversial ground with this regular feature. Our recommendation is to read, research, and discuss to figure out what's best for you and your bees. There are few black and whites in beekeeping.*

Q. **I have a Kiefer Pear tree that is always loaded and lots of them rot on the ground, attracting yellow jackets. Because of an early warm spell followed by hard freezes, 2012 was one of only two years in fifty that it did not bear. As soon as it froze in the fall and the honeybees clustered, the yellow jackets attacked my hives. I closed the entrances and put yellow jacket traps on top of my hives. What should have I done?**

—Mugwumps

A: Sounds like you did everything right, but perhaps a little late. Next time, consider putting the entrance reducers in earlier, and putting out traps or something sweet AWAY from the hives. (Note: Mugwumps sent us this email last fall. We're running it now as it is perhaps about to be applicable again this time of year.)

Q. **I've heard that about 20% of hives have two queens in the summer. Got one of those. I was showing a 10-year-old and his Dad a hive, and pointed out our marked queen. Of course it was the kid who asked "well, what's that other long bee then?" Is there a good reason to leave two queens in a hive?**

—C. S., Indiana

A: We turned to bee expert Cleo Hogan for this one, who provided his usual great insights:

There is abundant evidence that the two queens may live side by side in the hive for a period of time, both laying eggs, until one is destroyed. During supercedure, the old queen is still around when the new queen emerges and leaves for her maiden flight. Kinda like insurance, in case the new queen does not come back from her maiden flight, didn't get mated sufficiently, or doesn't start laying eggs. Abundant literature suggests the two queens coexist for a period of time to ensure that the new queen will lay properly.

There is widespread disagreement as to how the old queen is treated in supercedure. There are those who say they tear off legs, wings etc., and throw her off the front porch, but only after the new queen is laying. Some say workers will ball the queen and kill her. Some say the two queens will fight it out until one is killed. There is some literature that suggests they simply banish her from the hive without killing her, again, only after the new queen is approved and accepted.

I would not leave two queens in one hive unless you double screen them, and I can only think of one reason to do that, (after the honey flow is over), and that would be to see which one is the best queen. After determining that, I would split away the lesser queen, (unless she is not worthy to keep) and have two colonies. If both are laying, and worthy to keep, there should be plenty of brood to take and start the new colony. Plan on taking it through the winter in one deep, or one deep and one shallow.

The reason to double screen is, if, they meet in either the bottom box or the second box it is possible that they could damage each other, (resulting in no good queen), or the lesser queen could win.

If you don't want to split and make a new hive, and if both are good queens, do you need a good queen in another hive? If so, cage her, and requeen her to another hive. Perhaps a close friend needs a queen.

Nice to have a two queen "problem". There are lots of possibilities. Certainly better than no queen.

Q. **Hello, this is my first year at beekeeping. I read *Beekeeping for Dummies* and have researched a lot of websites to get the knowledge needed to raise a healthy hive. I received a package of Italian bees on April 20th. I fed them 1:1 ratio of sugar water every day for this is the information I was seeing in my searches. I put my first super on in the middle of June because the bees were doing so well. I only found out a week after I put my super on that I need to quit feeding them sugar water for that is what I will get as honey. I pulled four full frames of capped honey and extracted it today. It seems that a lot of sugar water is in the honey. Should I throw it away or refeed it back to the hive to prepare for winter? I live in Pittsburgh, PA. I also split the hive because they were doing so well.**

—Dave E.

A: This is a classic "ask three beekeepers, get at least three different answers" issue. Salute on having such an amazing hive, and now two of them assuming your split is doing well! I think I'd feed it back to the hive, or put it in an open feed situation, where you'd open the caps in a location several yards away from the hive to minimize the chance of raiding, and would allow any interested insect to feast.

Readers, other thoughts?

—Camilla, editor

Questions or comments about this article? Please go to kelleybees.com/blog.

When you use 8-9 drawn comb frames in a 10-frame honey super, bees often build way beyond the frame, allowing for easy de-capping on our part, and less cell building on their part.

Sweet as Honey

National Honeybee Day is August 17th. Celebrate by doing the waggle dance, planting native flowers, spreading the word about the joy of fresh honey, or encouraging more people to keep bees. For more information, go to www.nationalhoneybeeday.com.

> I noticed the comment in the last issue about shade on hot days. I cut a piece of metal roofing about six inches bigger than my outer cover and put it on my hive and weighted it down with some bricks. Instant shade plus my woodenware lasts longer with the rain off. Thanks.
>
> *—Dave B.*

A swarm returns—it happens! Photo courtesy of Herb Lester.

We've had a handful of readers respond to the article on the Hive Monitoring System project (see our July issue), saying they were interested.

This isn't a Kelley's project, although we always appreciate efforts that help our favorite insect.

If you're interested in participating, please contact Anne Marie Fauvel, at fauvela@gvsu.edu.

In our July issue we also asked readers to share their stinging experiences—the interesting story or stories behind them, the most they've ever received, and any tips on treatment and prevention. June P. shared this story, noting that while it isn't a stinging experience, it is "certainly an unusual one."

A few years ago when I was taking care of two new hives for some people with no experience, the gentleman who was helping me and I stood to one side of the hives, just admiring the flight patterns and the gentle nature of the bees. Neither of us had handled bees for many years as we are both in our 80's and residents of a retirement community. I know I was a bit uncertain at first when we opened the first hive, but soon regained my confidence and the joy of working with particularly gentle bees.

As we stood watching, something that came whizzing out of one hive caught my attention and I bent down to see what it was. To my shock and amazement it was the marked queen!! I called my partner's attention to her, and he bent down, verified my perception, and gently lifted her and placed her at the entrance of the hive from which she had come. We assumed it had been some kind of accident, although she did appear a bit battered.

She entered the hive and we continued to watch. A few seconds later something was carried out by a bee and dropped on the gravel. Again it was the queen, quite obviously being deposed by her constituents. Clearly there was a problem so rather than putting her through another trauma we opened the hive, found it to include a number of queen cells and realized we had witnessed an unusual event.

We were advised by a club mentor to destroy the cells and order a new queen, but I felt the hive had proven to not like a strange queen and in that context might do the same to a newly introduced one, no matter how carefully the introduction took place. The original introduction had taken over a week after hiving the bees, with the queen remaining sealed in her cage.

We provided an occasional frame of eggs and sealed brood to the queenless hive to sustain their population, and eventually they had a queen again and were able to maintain their own population with apparently no additional problems.

Sadly, inexperienced people took over caring for the hives and neither survived the winter—lack of stores, pulling frames out of the center of the brood chamber, etc. The inexperienced beekeepers were not even aware of the condition of their bees and continued to open hives in December and February—claiming the bees had all died when the chairman of the group had been on a cruise.

Fortunately the well-kept log proved that highly unlikely. It pays to keep careful notes.

Editor's Note: What a remarkable event to witness! You may want to check out the answer to question on two queens in our FAQ section this month, as this anecdote notes one of the ways they get rid of a queen.

W. A. Grindell, of Three Rivers, set out an empty box, not even for trapping purposes, and shared with us his photo of how he ended up with a full occupation. Once we got past our jealousy, we asked him to share how that happened:

"It's May and I have my Buckfast hive outside of the garage, doing their thing. I cleaned out my garage and placed my empty bee equipment out to be repaired/painted/inventoried. I took my best boxes and matched them with bottom boards and covers, and threw in a few frames that were ready to go (new foundation, drawn comb, some with a little honey) just to see how many empty hives I had ready for the swarm season and splits. I stacked them up 6-8 feet from my active hive.

I started noticing bee activity around the entrance of an empty hive, and wrote it off as robbing. That evening I saw a whole lot of bees clustered around the entrance and thought "that's really odd bee behavior," took a closer look and found somebody had taken up residence.

The next day I checked my other hives; all queens accounted for. So, my next task was to open the new/swarm hive. I found a very large swarm, already at work, building and repairing comb on the frames, building new feral comb in the open spot without a frame, but no brood production.

A swarm finds a great new home, photo (and home!) courtesy of W. A. Grindell.

I waited a couple of weeks and opened up the hive. The queen was laying now, lots of honey stores already. I cleaned out the feral comb, replaced it with new foundation, put an empty super with new foundation on top, and put an empty box on top of that containing the feral comb so the swarm bees could rob it out without stray bees being able to rob it.

It pays to keep careful notes.

I waited about a couple more weeks, opened up the hive to inspect, found my new queen (big chunky little gal with breeder hips) and set her aside for safekeeping. I pulled three frames of brood—one had swarm cells started, and put them into a nuc box with two frames of honey. So now I have my first split from this hive. I'll pull another split or two later this summer.

I know these are from an original Italian hive of mine, just by their looks and how well they produce (I've lost so many swarms over the years; the area must be saturated with their genetics.). Plus they have a nasty habit of holding a grudge after I open the hive. I can be 50 feet away working quietly and they'll send out a bee just to sting me. I'll be in the garage working and a bee will come in and sting me. After about three days, I can work right next to the hive with no problems.

I know they can be spiteful, but they are fantastic producers. Last year I got nearly a hundred pounds of honey from just that Italian hive and they put up the required eighty pounds needed to get through the winter. They don't scale down brood-making until late in the season, and then you need to clean the hive entrance at least twice during the down season (lots of dead bees). They're easy to start up in February: a little 1:1 sugar water, a little pollen substitute and she's laying in March, ready for April and May.

I am so grateful they came home. I will take better care of them and not take them for granted. I like the Buckfast strain, but they are slow to build up, slow to get started, very laid back, easy to work, but not the greatest producers thus far. The "Italian" strain come up to speed early, good producers, but quite *!& to work with. I know the dog hates them! The cats just move slowly, no sudden movements, no noise and they nap and hang out right around the hives, no problems. A couple cats sleep on top of the hive in the evenings, no problems.

To sum up how I gained a hive: No bait, no nothing, just an empty hive and good/divine luck.

"This was my first newsletter and I was very impressed with the useful information so well written and the many pictures. I look forward to future newsletters. I was an avid reader of that earlier Modern Beekeeping which had Walter Kelley's pictures from his trips to visit beekeepers around the country. This is a very worthy successor indeed. With best wishes. *—David Lyons*

Readers—we'd love to share excerpts of any of those earlier editions if anyone has some. And, we're glad you appreciate this publication; we sure appreciate the feedback. And the pictures and the stories, so please send them to Editor@Kelleybees.com, thank you!

Dronings from a Queen Bee

Playing with My Bees

By Charlotte Hubbard

I was on my way to the apiary, minding my own business, when local law enforcement pulled up beside me.

"What are you doing?" asked the handsome young deputy, identified as Hagen.

Honesty is always the best policy, so I truthfully explained that I was just going to go play with my bees. As I said it I knew there was no way Officer Hagen understood "going to play with bees". Heck, there are torturously hot days in the apiary when even I don't understand why I'm going to play with bees.

But, those days are few and far between. Playing with bees is the primary reason I'm a beekeeper. I could claim more noble reasons for my obsession, like saving peaches through pollination, or sharing healthy honey with my friends and family. But, unless you're a commercial beekeeper able to stand atop a soapbox of hive bodies, most of us hobbyists, truth be told, are beekeepers because we love to play with bees.

"You play with bees?" questioned the officer.

Before I could answer, Officer Hagen's partner-sister pointed out that a neighbor kid was in their yard. The two of them raced off at three mph, leaving me to peacefully play with my bees.

So, what does "playing with bees?" entail? It depends on the season and the excuse I create for opening the hives, but the bees and I have our favorite games.

Twister: "Right-hand-red, right-foot-blue, left-foot-green isn't that difficult. "Both-hands-full-honey super while right-hand-hive-tool and both-feet-in-clumsy-boots while pivoting to put the honey super atop the top cover which oopsie I forgot to turn upside-down" is a game of twisting even the most agile youngster would find challenging. Sometimes this game goes by a different name, "Throw Out My Back".

Hide and Seek: This is a favorite that all honeybees love playing with beekeepers. As soon as I've cracked the cover they'll herd the queen from near the brood chamber to some obscure spot, especially if my goal is to mark her. Sometimes though she'll "hide" in the middle of the first frame I pull—the frame I always pull first because the queen is never on it.

And I swear you can hear them giggling.

Kick the Can—the Smoking Can: Most of the time I take the smoker to the apiary. Most of the time I light it. Most of the time it goes out after four seconds and ends up sitting on the ground, where I'll inevitably kick it over.

Most of the time the tinder just falls out, but there was that one time when the tinder fell out and reignited and the bees got to watch me play "Junior Firefighter" in my big clumsy boots. Again there was that giggling.

I Spy: Playing this with bees has an interesting twist, because when I say "I spy with my little eye" the bee I'm playing with rejoins with "and I spy with my two compound eyes and three simple eyes".

I spy things like deformed wing virus, capped honey, mites, or the queen (when I'm lucky). Little Miss Five Eyes spies for something like a hole in my glove, or a gap in my suit.

"Professional Gambler: I Keep Bees"
from Gifts and Promotions, Catalog # 58-LK

I seem to lose this game a lot, and it is always a stinging defeat.

Poker: Keeping bees—like driving down the road or falling in love—is a gamble. But how do you win at gambling? I hear a poker face is helpful.

I have a power hive on my Dad's 700+ acre fruit and vegetable farm. When I last pulled that honey, I took along Lola, a migrant worker who wants to learn about bees. Sure, it'd be helpful if Lola spoke some English, or I spoke more Spanish than just "ay caramba!!", but we pantomime and it works for us.

When we pulled into the apiary, you couldn't help but notice the front of the normally white power hive was brown with a thick, wiggling coat of thousands upon (and yes, I truly mean upon) thousands of honeybees.

"Ooooohhhhh," shuddered Lola.

Who needs a common language? I knew *exactly* what she meant.

I didn't know how to say in Spanish that I was nervous from the top of my veil to the toes of my big clumsy boots, and it wouldn't have mattered anyway. A beekeeper's gotta do what must be done.

I put on my best poker face, as did Lola. We had two burgeoning honey supers off and the top cover back on before most of the bees even realized we were stealing their honey.

I think in the future though, we won't be so lucky. The bees will remember that last time we cracked the top cover that they were robbed.

Hopefully they won't call local law enforcement—but if they do, it'll take them a while to arrive.

Questions or comments about this article? Please go to kelleybees.com/blog.