



The Honey Pot



MONTGOMERY COUNTY BEEKEEPERS ASSOCIATION
PROMOTING BETTER BEEKEEPING

AUGUST 2007

UPCOMING EVENTS:



NO MONTHLY MEETING IN AUGUST

MCBA usually meets on the second Wednesday of each month.

EAS 2007
Short Courses and Conference
August 6-10 2007
University of Delaware
Newark, Delaware

MONTGOMERY COUNTY FAIR
August 10—18, 2007
VOLUNTEERS STILL NEEDED!
SEE PAGE 10 FOR DETAILS

MARYLAND STATE FAIR
August 24—September 3, 2007
VOLUNTEERS STILL NEEDED!
CONTACT DAVID BERNARD OR
MARY FENDRICK

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HIVEWORKS August in the Bee Yard by George Meyer

I don't get the weather this year. It's late July, it should be so hot that we melt when we walk outside. Weather is more than just a passing interest for us farmers. Understanding the weather and its impact on our bees is key to understanding what's going on inside the hive. July and August are hot. It's hot for us in our white coveralls and veils, and hot for the bees. Your bees will "beard" at this time of year to reduce the internal temperature of the hive to optimum levels. So if you see a big bunch of bees hanging around the outside of your hives, they are probably not about to swarm. (I have to say "probably" because I just caught a swarm yesterday).

July is a great time for reflection. I found it was an average year – honey crop wise. Some of my yards did well, while other yards barely produced one super. I'm blaming the cold snap in the first two weeks of April, as well as insufficient rain to really get the trees to cranked up with full nectar loads. Maryland weather never seems to be "just right." If we don't have enough rain in May, the Locust and Tulip Popular trees don't seem to produce as much as they should. When it does rain, we seem to get those massive thunder storms that knock all the blossoms down prematurely.

Being late July, you should be well underway (if not completed) with the honey harvest. The heavy lifting over, our chiropractors, by now, have made all the corrective adjustments and our masseuses have worked out the kinks in our lower backs and shoulders. How did you do - not with the back rubs but - with your harvests?

Hopefully everyone has a honey crop. With a healthy hive or two, you could have ended up with 30 to 100 pounds of honey (Maryland average is about 30 pounds, if I'm right). Pardon me, but - what are you going to do with it? That's a lot of corn muffins and cups of tea. I recommend giving a bunch away to family, neighbors, friends, enemies, casual associates, and the mailman. Honey makes great holiday gifts, birthday gifts, house warming gifts, hostess gifts, just because gifts... Everyone loves to get honey (at least the first few times). This will probably work for most of your crop.

But what if you've expanded a little and truly have some excess? The Montgomery County Fair and the Maryland State Fair will sell some of your honey. That's quick and easy. But you may still need to find yet another market for your honey. The good news is that there is a huge untapped market waiting for your local honey. So here is what I say – let's grow the market for local honey, not fight it out with each other in some little store. If you see a market where someone is already selling local honey, find another market. There are plenty of perfect little country and health food stores. Do not hesitate to steal market share from the honey packers. Packers buy honey from beekeepers from resale. 99% of honey you see in the stores is from packers. I believe in competition, but the local honey market is so underdeveloped that there is no reason to compete against each other when we are really competing against sugar, corn starch and Sue Bee honey. So, let's expand our market; not kick each other around!

HIVEWORKS July in the Bee Yard

by George Meyer

Ok, so you've pulled, extracted and bottled all the honey. What do you do with your wet supers? Wet supers have been extracted; however, there is still plenty of sticky stuff. They need to be cleaned before you can store them. The bees are the only ones who can do this. I've seen some innovative solutions proposed on the web site. Worth a try, I guess. I've always had access to the countryside to let them at it. If you've never seen how bees can rob, I recommend putting out a wet super or two and watch them go at it. Your neighbors will have new respect for you. (Don't really do this.) By the way, did you notice that I didn't provide any answers to the "wet super cleanup" problem?

Now don't just stack up your hard-earned drawn comb supers in the garage or shed. The dreaded wax moths will swoop in and your, and the bees, hard work will be gone in a flash. Moth crystals are a must in treating for wax moths. I understand that some people put their supers in garbage bags, and you should still put some moth crystals in there. Make sure to use the chemical that starts with a "P," and not the one that starts with an "N." If you haven't cleaned up wax moth damage, you are really missing something. It's just about the worst beekeeping job there is. You will have to learn how long the crystals last in your environment. The supers in my garage can go all year with two treatments. I tried putting

some in a storage shed and lost everything to the moths within two months. L

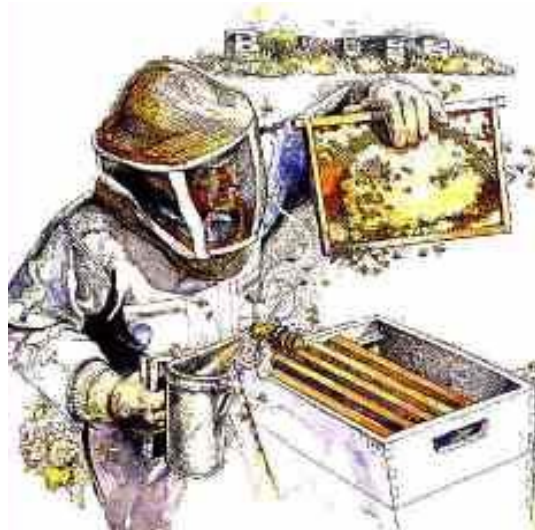
What is your mite treatment strategy? When do you need to start / stop treating? Do you know what your current mite count is? There are a bunch of new and interesting treatment methods. Each has its advantages and disadvantages. I use Sucroside and have already applied the first treatment. The second treatment will go on over the next week or two. Whatever strategy you've decided to follow, read the label and follow the directions to the letter.

How are your queens performing? Summer re-queening is harder than spring re-queening. If you are going to do it, re-queen now. Finding a queen in September is not easy.

Now, I have a question for you. I've been using pine needles in my smoker, but the resin is getting so thick that it took me twenty minutes (and way too much speaking "French") to get the lid off. Who has the solution for this one?

Overall, unless you have a real reason to go into your hives this month and next - don't. The bees don't appreciate your visits and it's really too hot for it to be much fun.

Happy Beekeeping and let me know if you have any questions. BeeGeorgeHoney@hotmail.com



MC  A Notices

MCBA Bulletin Board and Website

Are you on the MCBA email list? Our association's bulletin board is a great place to post your bee questions and share your experiences. If you are not yet signed up for the list, email Beemoderator@gmail.com to be included. The email list includes announcements of events and opportunities, discussions of the local beekeeping situation, and questions and answers about beekeeping from our local beekeepers. Remember to visit our website www.montgomerycountybeekeepers.com. If you have any ideas about the Website, please contact Woody Medina at wmedina@pragmatiq.com

MCBA Membership Directory

The Member Directory is available to be picked up at monthly MCBA meetings. The majority of members requested that the directory not be distributed electronically nor posted on the MCBA website, so this request will be honored. If a member would like to make a mailing that is of interest to the membership of the MCBA (such as members who sell nucs and queens), they may request mailing labels for members who have chosen to be included in the directory. If a member does not wish to receive these mailings, please email Mary Fendrick at mary@fendrick.com with that request.

Bee Forage: Agastache (ag-ah-STACK-key) aka: Giant Hyssop by Kitten Reames

This plant is an all-around winner: A native perennial, very drought tolerant, non-invasive, relatively pest-free, fragrant, a medicinal herb, long-blooming (the name Agastache is derived from the Greek words for “many” and “flower spikes”), and attractive to a wide range of pollinators, including honeybees. There are numerous varieties of Agastache, both species and hybrids, available in colors ranging from dark blue/purple through reds and yellows. It is native to both Eastern and Southwestern U.S. states, although different varieties occur in each region. Our area has both *Agastache scrophulariifolia* (Purple Giant Hyssop) and *Agastache nepetoides* (Yellow Giant Hyssop).

In spite of being a member of the Mint family, Giant Hyssop knows its boundaries. It forms a relatively tidy upright bush, approximately 3 feet tall and 2 feet wide. The bloom season lasts from July through first frost. You can extend the bloom productivity by deadheading, which delays the production of seeds.

Plant in full to partial sun, with well-drained soil (Agastache is not picky). The Southwestern varieties are used to dry sandy soil and adapt just fine to the more organic mix found in most gardens. Cut Agastache back to within 3 to 4 inches of the ground any time before May. It will send up new growth each spring from the base.

Here are pictures of the busy girls at work.



There's plenty to share. Silver-

Spotted Skipper butterflies like it; so does this Carpenter Bee. Tiny beetles like it, and of course, the Bumblebees are always there.



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Help Needed For The Honey Pot!

I will be away for the month of September and help is needed in the layout and distribution of The Honey Pot. Anyone interested in helping out should contact me, or David Bernard. This could be a great opportunity to try your hand at editing with an eye to taking over when my year as editor is over! Get involved with the group!

Thanks,

MaryEllen Kirkpatrick

Book Review: *NATURAL BEEKEEPING, Organic Approaches to Modern Apiculture* by Ross Conrad 246p. Submitted by Laura Costas

Friends, here is a book that's likely to please everyone in our club.

Ross Conrad's chance intersection with beekeeping in the late 1980s brought him to no less a mentor than Charles Mraz and his son, Bill, of Vermont. Conrad is the former president of the Vermont Beekeepers Association, he runs a market-garden business in Middlebury, VT, and now he has written a book which details beekeeping with an emphasis on sustainability. His book is handsome, well illustrated and written in a calming style. It's full of cogent sources without being in-your-face authoritative, presents controversial topics such as regression to small-cell foundation without editorializing. But most important, this book gives the small-scale beekeeper a practical way to move away from the quick fixes that are now proving problematic and toward proactive practices that will lead to healthier colonies over time.

Conrad starts by suggesting that many of the problems in beekeeping today stem from the central problem of using an industrial model—essentially the factory farming of bees and bee products, where bigger is better and growth is the only way to profit. By moving away from that model toward a more biology-based model, he says, we can enjoy a less stressful, more natural, and possibly even more productive relationship with our bees. Since we in Montgomery County are hobbyist or family-farm beekeepers rather than big commercial concerns, this strategy can benefit all of us.

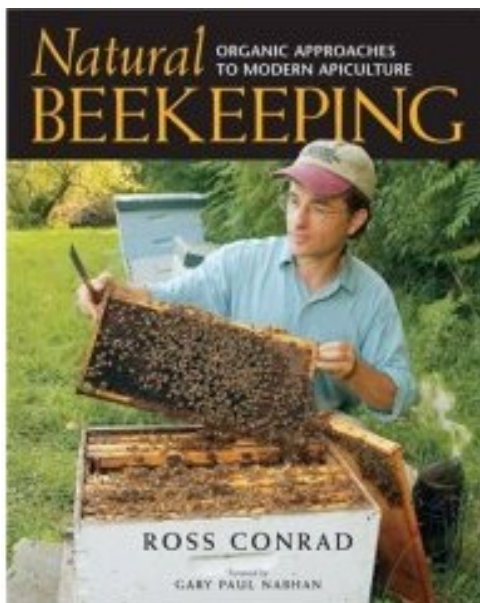
Natural Beekeeping is a practical book. It shares Charlie Mraz's tip on finding the queen, offers a way to tie down a hive cover in anticipation of a long New England winter, suggests criteria for which hives are the best to split, and shows how to modify a standard bottom board in order to make 2 nucs at once instead of building or buying special equipment. The book covers all the fundamental concerns of beekeeping in some detail.

As a sign of the times, of course, the biggest chapter in the book is on parasitic mites. Conrad profiles each of the "softer" chemical treatments, traps, sugar dusting, a

treatment involving heating the hive that I'd never heard of, grease patties, and biological and genetic interventions. His understated and flame-retardant treatment of treatments will be appreciated by all who are weary of accusatory, bi-polar arguments on that topic. Additional chapters address diseases and other pests with a similar pragmatism, and his notes on the overall environmental benefits of a species like wax moth

tend to restore one's sense of perspective following the descriptions and photos of destruction inside a hive.

I was disappointed to see that he doesn't have anything to say about top bar hives, which certainly have a place among the strategies for sustainable beekeeping. These hives are ultra low-impact environmentally and offer beekeepers new ways of being close to bees and observing their behavior. But I really can't fault the author too much even on this, as the book closely follows his personal experience, and he himself isn't working the top bar hive.



As a new beekeeper I feel unqualified to say whether or not the book will be helpful to long-time beekeepers, but the source material appears new, varied and obscure enough to suggest that there are thought-provoking details and references for veterans as well as neophytes. I can certainly say that the book would make an excellent addition to every beginner's library. It's hot off the press and addresses the latest strategies, issues and concerns, and for the newcomer it reduces the amount of confusing synthesis of information required when only older textbooks are available. The newer attitudes toward sustainability will ring bells with younger people who are already on board with that outlook and with city-dwellers who are looking at beekeeping as a way to be closer to nature. Anyone who is considering beekeeping but is still on the fence will greatly benefit, as it presents an up-to-date look at just how much work is involved and what the stakes are. Happily, Conrad presents beekeeping as an endeavor for the future more than as an industry in crisis, and newcomers will find much to inspire them to contribute to the success of beekeeping.

For the moment, all is quiet on the neighbor front – no more threats on the bee colonies, and all 11 bee colonies are still on our property. I'm hoping things stay that way. In related news, our title company is trying to find out how they missed finding the covenants on the property (and what to do about it), however that is not strictly a beekeeping issue. So, we'll continue with the bee colony activities.

I finished up bottling my 2007 honey harvest last night. Normally, I don't try for a honey harvest from new colonies, but one developed so fast I felt comfortable giving it a super. The result was 30 pounds of honey (about what you typically get from a medium super), and more importantly, a box of drawn frames. I've also been told to expect a kudzu nectar flow in about a month. I got to try kudzu honey when I was in Huntsville, AL a few years ago; it is a purple honey with a nice flavor.

How do you know if you have a nectar flow going on without looking at a calendar? One way is to use a hive scale and observe a hive gaining weight. I don't have a hive scale. The way I use is to look for burr comb construction between the inner cover and the frames. When I observe the burr comb, the supers go on.

At the other end of the hive strength spectrum, only four of my colonies are still on feed, and even they are going through feed at a slower rate than before. My feeding system consists of gallon paint cans inside empty medium hive bodies. The space between the paint cans and the empty hive bodies quickly gets colonized by small cockroaches and other insects (including the occasional bee). Insects attract insect predators, so when I went to check the feed cans on two of

my colonies, I found black widow spiders (females).

Regrettably, my camera wouldn't zoom in enough to get a good picture of the spiders. For the record, female black widows are large spiders (a bit bigger than a quarter with the legs outstretched, and they have shiny black bodies the size of large green peas. The famous hourglass mark is on the underside, red, and quite small in relation to the body size. The web is haphazard silk strands.

Black widow spiders like dark places like my empty hive boxes, so I must have provided them with great habitat. Still, I didn't want to leave the spiders in my boxes, so I shook them out into a hollow tree with plenty of dark corners.

Right now, the hot weather has hit with a vengeance, so I largely stay out of my colonies. The main hive task has been the monthly *Varroa* mite check, and unfortunately (but not unexpectedly) the *Varroa* counts have been increasing. Down here, the "official" treatment threshold is 60 mites/day on a sticky board. None of my hives have hit that number yet, but some are close. Treatment day is approaching. Incidentally, sticky boards also catch small hive beetles.

I like to rotate my mite treatments; this year I've selected Apiguard. The product has a desirable combination of easy use and a less toxic active ingredient (thymol) than many of the alternatives. The product works by sublimation, so hot August weather may become an issue.

How well will Apiguard work in my hives? I'll let you know next month.

Bill Miller is a Master Beekeeper and longtime MCBA member who now lives and keeps bees in Alabama



Pumpkin Blossom. Photo © Toni Burham, Taking pictures of bees in pumpkin blossoms is probably easier than shooting fish in a barrel. The bees just get in there and roll around, for a VERY long time. The biggest problem is that other pollinators want to get in there, too!



Honey Pot Submissions It's your newsletter- please participate!

Submissions for the Honey Pot are due by the 25th of each month.

Send submissions electronically to: maryellenkirkpatrick@cox.net

or by mail to:

MCBA Newsletter
10929 Beach Mill Road
Great Falls, VA 22066

Telling The Bees

Back to the time of Plato, many people believed that a person's soul left its body in the form of a bee. Perhaps it is from this the belief that the practice of "Telling The Bees" originated. When a member of the household died, the bees must be told, lest they follow the departed soul away from their hives into the heavens. A friend or family member would go to the hives and whisper to the bees of the loss, thus preventing them from abandoning their hive. Often friends and neighbors would learn of a death in the family when they passed the home and saw black ribbons draped on the bee hives.

On Friday July 20, 2007 Arthur H. Imirie passed away. Arthur was a longtime member of MCBA and often attended meetings at the Brookside Nature Center accompanied by his great dane. Arthur is survived by his father, George W. Imirie Jr. who founded MCBA. Along with his father, Arthur was a long-time fixture at the Montgomery County Fair manning the bee cage, demonstrating how gentle honey bees are and selling honey.

Falling Asleep in a Garden

By David Wagoner

All day the bees have come to the garden.
They hover, swivel in arcs and, whirling, light
On stamens heavy with pollen, probe and revel
Inside the yellow and red starbursts of dahlias
Or cling to lobelia's blue-white mouths
Or climb the speckled trumpets of foxgloves.

My restless eyes follow their restlessness
As they plunge bodily headfirst into treasure,
Gold-fevered among these horns of plenty.
They circle me, a flowerless patch
With nothing to offer in the way of sweetness
Or light against the first omens of evening.

Some, even now, are dying at the end
Of their few weeks, some being born in the dark,
Some simply waiting for life, but some are dancing
Deep in their hives, telling the hungry
The sun will be that way, the garden this far:
This is the way to the garden. They hum at my ear.

And I wake up, startled, seeing the early
Stars beginning to bud in constellations.
The bees have gathered somewhere like petals closing
For the coming of the cold. The silhouette
Of a sphinx moth swerves to drink at a flowerhead.
The night-blooming moon opens its pale corolla.

Poem: "Falling Asleep in a Garden" by David Wagoner from *Traveling Light: Collected and New Poems*. © University of Illinois Press, 1999. Reprinted with permission. Special thanks to the author and to Lynn Scholz getting permission to share this with the Honey Pot readers.

Pollinator Stamp Released

Recently celebrated was the inaugural National Pollinator week 24-30 June 2007. Proclaimed by U.S. Secretary of Agriculture, Mike Johanns and supported by a resolution introduced in the Senate, the concept was initiated by North American Pollinator Protection Campaign (NAPPC) and the Co-Evolution Institute of San Francisco, CA. More than 30 Governors, including Governor O'Malley of Maryland, issued proclamations recognizing the week. National Pollinator Week follows the 2006 publication of the National Research Council/National Academy of Science report of the status of and seeming decline of pollinators in North America and elsewhere.

One highlight of the week was the release by the U.S. Postal Service in Washington, DC on 29 June of four pollinator stamps. "Depicted on the stamps are four wildflowers and four pollinators. Two Morrison's bumble bees are paired with purple nightshade. A calliope hummingbird sips from a hummingbird trumpet blossom. A lesser long-nosed bat prepares to "dive" into a saguaro (cactus) flower. A southern dogface butterfly visits prairie ironweed." (from the USPS *Postal News*.)





TRACHEAL MITES DEMYSTIFIED

If you went to the MCBA short course or if you read any beekeeping books that were published in the past 20 years, I am certain that you have heard about the two mites – varroa mites and tracheal mites. In last month's article, I spent some time discussing ways that you can determine the number of varroa mites in your hive. This month I will focus on tracheal mites.

THE LIFE CYCLE OF A TRACHEAL MITE

What is a tracheal mite anyway? A tracheal mite is a microscopic parasite that feeds on bee hemolymph (bee blood). Their scientific name is *Acarapis woodi* (or *A. woodi* for short). Measuring just 120 to 175 micrometers in length (about 1/200 of an inch), you can't see them without the aid of a microscope. These mites live and reproduce in the breathing tubes of the bees (trachea) and they feed on the bee's blood.

The only time a tracheal mite will be on the outside of the bee is when the pregnant female mite leaves the current host bee to enter a new host bee. When the pregnant tracheal mite leaves her host bee, she exits the bee at one of the bee's spiracles (breathing holes). She then climbs to the end of one of the bee's hair and waits until a suitable new host is found. Studies have shown that the mite will be much more likely to transfer to a young bee (generally 4 days old or younger) than an older bee. To discriminate between the older bees and the younger bees, the mite is highly sensitive to hydrocarbons located on the hair of the bees. From these hydrocarbons, the mite can determine which bee it wants to transfer to.

Once a suitable host has been found, the mite will transfer to it when the bees are close together. One way this can happen is during trophallaxis, when the (older) forager bees are transferring nectar to the (younger) house bees for processing in the hive. When the bees are close together, the tracheal mite will transfer from one bee to the other.

Although the tracheal mites prefer to transfer to younger bees, they can and will transfer to older bees as well. When this happens, there is a shorter time for the mite to reproduce in the host and as a result, they produce fewer offspring. The Crisco Patty treatment (discussed later in the article) uses this fact to confuse the mites so they transfer to older bees at higher rates, and as a result they produce fewer offspring (lowering the mite level).

Once the pregnant bee has found and transferred onto a new host, the mite will enter the bee's spiracle. The mite generally enters the first spiracle located on the thorax of the bee. This particular spiracle is used by the bee to breathe out (expiration). They tend to ignore the second and third spiracle, which are used to breathe air in (inspiration).

Once the mite enters the bee via the spiracle, it will start laying eggs for the next generation within 1 to 2 days. In general, a single mite will produce 8 to 10 offspring over the course of 11 to 12 days. The eggs turn to larva and then develop into the next generation of mites. The total time between the egg being laid and a fully developed mite is 11-12 days for male mites and 14-15 days for female mites. Once the adult female mite has finished molting, the mite can begin to mate. (Try saying "molted mites means mating" ten times fast). Once the females have mated, the female mites exit the spiracle and go off to repeat the process. The male mites apparently stay behind in the same host.

MANAGING TRACHEAL MITES

Here is a partial list of problems tracheal mites can cause:

- Colonies to either die off completely or dwindle to just a handful of bees during the winter, even if there appears to be plenty of honey left on the hive in a location where the cluster could reach it.
- Presence of bees with the K-wing virus (which you can also see with severe varroa infestations)
- Presence of bees that are unable to fly (they can only crawl).
- Presence of fecal spots at the hive entrance (my explanation: the infested bees couldn't fly for a cleansing flight, so it relieved itself at the hive entrance)
- Reduced brood rearing which lead to a reduced build-up of bees in the spring.
- Abnormal winter clusters

Although all of these symptoms can occur during a tracheal mite infestation, their presence alone is not the absolute sign that you have a tracheal mite infestation. This is because these symptoms may also be caused by other

pathogens. The only way you can tell for sure that you have a tracheal mite infestation is by dissection with a microscope.

As you can see, it is important to maintain low levels of tracheal mites. But how do you know the levels of infestation of a particular colony? You can't test for them the way you can test for varroa (see last month's article) – they're too small to see. Unfortunately, the only way we can tell a hive is overly infested with tracheal mites is when the hive dies and you send some samples of the dead bees to the Beltsville Bee Lab for dissection. So how do you know if your hive is infested? The answer is that you can't tell, so you make the safe assumption that every hive is infested with tracheal mites and you apply a treatment.

What treatments are out there for you? Here is a partial list:

Menthol crystals: Under warm temperatures (above 80°F), menthol will turn to vapor. When a substance becomes a gas, we say that the substance "volatizes". Menthol volatizes at 80°F, which means that at 80°F, the menthol crystals (a solid) becomes a vapor (a gas). This menthol vapor is heavier than air and sinks down in the hive. When the bees breathe this in, the menthol vapor acts on the tracheal mites and it kills them.

For this to work, you need to apply this treatment when the temperature is warm enough (above 80°F). However, if the temperature gets too hot, the crystals will volatize too quickly and will force the bees out of the hive (and they may abscond). Because of this, timing of the treatment is critical. If you put the menthol on the hive too late (e.g. in September), the temperature won't be warm enough for a long enough period. The crystals won't volatize and you won't have an effective treatment. If you put the menthol on the hive too early (e.g. in July), the menthol will volatize too quickly and your bees may abscond. As it turns out, the perfect time to add the menthol treatment in our area is in mid-August.

The treatment needs to be applied for at least 14 continuous days. This is because the fumes only kill the adult tracheal mites. The mite eggs and larva are not affected. It takes 11 to 12 days for male mite eggs to become adult males and 14 to 15 days for female mite eggs to become full adult mites. We need the eggs and larva to grow up in order to be killed by the menthol fumes.

Here is what you do:

Purchase 50 grams of menthol for each hive you plan to treat. You can get it from the beekeeping vendor of your choice.

The menthol crystals should come in a little plastic netting pouch from the vendor. If they don't, you can measure out 50 grams of menthol on a scale and make a small pouch using window screen.

On or about August 15th, go to the hive to apply the treatment. You don't want to apply the treatment too early or too late. August 15th is the ideal date.

Take all supers off the hive

Put the pouch directly over the brood nest.

If you have a screened bottom board, then you want to slide the white board that came with the board under the screen (as if you were testing for varroa using the 24 hour mite drop method). You want to keep the vapor inside the hive. If you don't put the white board in place, the menthol vapor will just escape below the hive – wasting your time and money.

You need to leave the treatment on the hive for two full weeks continuously. If all the menthol is gone too quickly, add another pouch of 50 grams.

After two weeks, the menthol should all be used up and you should be left with an empty pouch. You can then remove the treatment and put the honey supers back on the hive.

Formic Acid Treatment: Formic Acid treatment has been getting a lot of press lately as an effective varroa treatment. What you might not know is that it was originally designed as a tracheal mite treatment. As with the menthol treatment, the formic acid will become a gas (volatize) and the gas will kill the tracheal mites (but not the bees) when inhaled by the bees.

Also, similar to the menthol treatment, the formic acid treatment only works on adult mites. As a result, we need to apply the treatment for 14 continuous days to give the mite eggs and larva a chance to become adult mites and be killed by the formic acid gas.

As with the menthol treatment, this treatment is dependent on the weather. You can only apply this treatment when the temperature is between 50°F and 80°F. If the temperature rises to 82°F or above within the first seven days of the treatment, the treatment should be removed until the temperature is again

below 80°F. This is because the formic acid vapor concentration will be too high and will kill the bees, including the queen (yikes!).

Due to the temperature requirement on the high end (at or near 80°F), you need to wait until late September or early October before you apply this treatment in our area. Because of this late treatment date, you may be entering the winter with a weakened population.

There are special handling instructions and application instructions that you should follow when applying this treatment. Be sure to read, understand and follow any and all instructions on the label.

Here is what you do:

Read the label. Don't just take my word for what you need to do. Formic acid is a dangerous substance if used improperly. Don't put yourself (or your bees) in harm's way. Make sure you read, understand and follow all instructions printed on the label. This is especially important for any safety instructions. If it tells you to wear goggles, gloves and respirator, then do it!!! Also be careful how you store unused packages and how you discard used packages. Don't put your family or the trash collector at risk.

Remove honey supers.

The hive should consist of just the brood nest in 2 deep hive bodies (or equivalent 3 medium hive bodies if that is your preference)

A 1.5" spacer rim and two small sticks are required to elevate the pad off the top bars

Apply the pad onto the sticks so that the holes in the pad are facing down.

Be careful to watch daytime temperatures and make sure you remove the pad if the temperature exceeds 82°F anytime in the first seven days of treatment.

Crisco Patties: Remember in the section on the life of the tracheal mite when I said that pregnant female mites leave one host and look for younger bees to move to? The Crisco Patty treatment works because it hinders the ability of the mites to find younger bees, and instead they move to adult bees with an equal frequency to young bees.

Honey bees are meticulous creatures. When you put the Crisco patty in the hive, they go after it to remove it from their hive. When they do that, the Crisco gets all over their bodies. This confuses the mites so they can't differentiate a young bee from an older bee. Since the population of the hive is predominantly older bees, there is a much greater chance that the mite will enter an older bee. When that older bee dies, the mites in the bee will die as well. The net result of this is that it reduces the tracheal mite's reproduction cycle, since the mites don't have as long a time to reproduce in older bees as they do in younger bees. With a weakened reproduction cycle, the mite population will drop.

To be effective this treatment needs to be constantly applied to the hive, all year long EXCEPT WHEN HONEY SUPERS ARE ON THE HIVE. Each patty should last about a month. Add a new patty before the old one is completely used up. If you stop the treatment, the mites will find the younger bees and the infestation levels will increase.

Here is what you do:

Make a mixture of 1 part Crisco (or your favorite or not-so favorite brand of vegetable shortening) and 2 parts of sugar

With this mixture, make some patties that are about 2 oz in size. Some beekeepers use an ice cream scoop to help form the patties.

When applying the patties to the hive, make sure the honey supers are not on the hive.

Select the hive body that you will place the patties on. Ideally, the patty will be at the very center of the brood nest. It should be centered both horizontally and vertically. If the entire brood nest is contained in 1 hive body, place the patties above the hive body. If the brood nest is split between two hive bodies, place the patties so they are located between the hive bodies when you close the hive back up.

Once you have selected where you are going to put the patties, place 3 or 4 of the patties on the top bars so they are located directly above the brood nest (not just in the center of the hive body).

If you have to, squish the patties down so that you can close the hive back up.

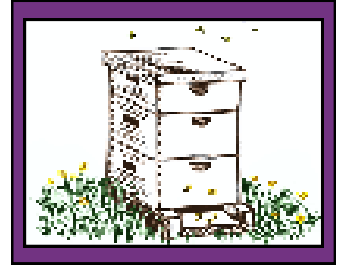
When you inspect the hive, add more patties when the previous batch starts dwindling.

IN CLOSING

There are other treatments for tracheal mites. Some varroa mite treatments also make claims to be effective on tracheal mites as well, but I can not attest to their claims. Be careful what you choose.

Next month, we will begin getting ready for winter. In the mean time, make sure you are feeding your hives with sugar water. August is a dearth period and they can starve very easily. I would hate for you to find dead bees in September.

Happy Beekeeping!!!



Montgomery County Agricultural Fair August 11th -18th

Time is running out! More volunteers are needed!

We are looking for beekeepers to volunteer two hours of their time to educate and amaze the public. It is a lot of fun and very satisfying. If you are thinking "I have only just taken the short course— I don't even have bees yet— I don't know enough!" than thing again! You know more than you think you do!

MCBA will also be selling member's honey on consignment at a booth in the Old Timer's Building. Last year just about every jar was sold. We also need volunteers to staff the sales booth. If you will be consigning honey to be sold, we ask that you spend at least 4 hours at this booth.

E-Mail Mary Fendrick at mlf64@comcast.net or call (301) 938-1030 and get on the schedule. Open time slots can be viewed at <http://pets.groups.yahoo.com/group/beekeeper/files/>

No regular MCBA meeting this month!

August is a busy month! Montgomery County Fair, Maryland State Fair, EAS all in addition to our bee management and our everyday lives... This month there will be no regular monthly meeting. See you in

Montgomery Count Beekeepers Association

www.montgomerycountybeekeepers.com

c/o David Bernard

26626 Howard Chapel Drive

Damascus, MD 20872

NO AUGUST MEETING