

THE HIVE TOOL

Volume XXXIII

September 2007

**PUBLISHED BY
THE CENTRAL MARYLAND
BEEKEEPERS ASSOCIATION
FOUNDED 1973**

President Frame

When you receive this newsletter we will be in the midst of the Maryland State Fair. Thank you to everyone who volunteered to help - setting up, keeping things organized, conducting demonstrations, selling honey, and talking to the public. Thanks to all of you who entered honey and/or hive products in the fair; hope you did well in the competition. Our exposure at the state fair, that is, the exposure the public gets to beekeeping, is crucial to our educational mission as an organization and it is only through the voluntary efforts of our members (and their families) that we can claim success.

So how are your bees? How was your honey harvest? Did you have a good summer? Looking at our colonies now we see lots of bees, usually hanging out on the front of the hive on a hot day to reduce the crowding and overheating inside the hive. But, if you haven't done so already, it's time to get in there and survey for mites (yes, you've got them!) to determine if your infestation warrants treatment. No need to treat a colony that hasn't reached a certain threshold (which is determined by the type of test you use: sticky board, sugar roll, ether roll, etc.). If you are unfamiliar with testing, information is available online or in publications or print. Also, we will demonstrate the sugar roll test (and discuss the others) at an Open Hive Demonstration at the Oregon Ridge apiary starting at 6:30pm, prior to our September meeting. The point is, if your colonies need to be treated, NOW is the time to treat them. There are many treatments to choose from, each with their own advantages/disadvantages. Again, you can read about them or listen to us discuss them at the September meeting. It is not too early to start feeding your bees. A colony's ability to store sugar syrup diminishes as the weather turns cooler; by the end of October the bees may not take sugar syrup at all. Begin feeding now and continue until the bees stop taking the feed. Some beekeepers add Fumidil-B to their feed as a preventative against Nosema, a form of bee dysentery not uncommon in the confines of the wintertime. Entrance reducers? Wait until it's cooler to reduce the entrance. Mouse guards? Most definitely! This is the year all of my colonies will get them (a first!). I'm sick and tired of dealing with the smelly mess and gnawing destructiveness of these creatures in my

overwintered hives; let them nest elsewhere. (well, . . . good intentions! Ask me if I really get this done).

While we're looking ahead and anticipating future bee stuff, I'd like to tell you about the Oregon Ridge Nature Center's Annual Honey Harvest Festival which will run from 11am to 4pm on Saturday and Sunday, October 6th and 7th in the Nature Center. All CMBA members are invited to participate (at no cost). You can sell honey or hive products, set up a display or simply talk to the public about bees. The Nature Center will be selling hot dogs, chips, soda and water. About 2000 people attend this annual affair. If you would like to participate, please contact Kirk Dreier at ORNC to reserve a space. Kirk asks that individuals selling honey agree on prices to avoid competition among sellers. I propose we use Maryland State Fair retail prices as our standard for prices. Obviously, some items for sale will not be on the fair list (ex., specialty honeys) and will be priced individually. But even if you do not sell honey or participate, please join the Nature Center staff and other beekeepers at this annual festival.

It's been a good summer. CMBA's July picnic had a good turnout, about 40 people, and the weather was exceptional. We went through colonies - Terry Westhead's daughter had the dubious honor of receiving the only sting. We had a delicious dinner, everyone contributing lots of good food - thanks to Mick Allman for "manning" the grill. Then we extracted honey - everyone got a chance to uncap combs and spin honey. It was fun to watch everyone's individual approach or style to handling the hot knife. We'll be looking for a place for our 2008 picnic, so let me know if you would like to host the event.

As summer rolled along, some of us found our way to Newark, Delaware for the Eastern Apiculture Society's convention. Over 400 people gathered for three days of bee activities (including an extra two-day three-tiered short course). Many top-notch authorities spoke on just about every topic related to beekeeping: honey, pollination, candle-making, management, equipment, mead-making, diseases and pests and the latest on CCD (still no smoking gun but expect some interesting research findings soon). There are always a lot of familiar faces at these events and it's fun to get reacquainted and talk with other beekeepers, check out the vendors, walk around and get a sense of where you are in the larger beekeeping community. I was humbled by the Master Beekeeper's Exam which I took for the first time, out of curiosity, thinking I must have learned something in my years keeping bees, reading about and teaching beekeeping. Well, I have learned some things and now I know how much I don't know.

Let no one tell you this test is for anyone other than the most knowledgeable beekeepers. As I often told my students, it was a learning experience!

Hey, our September general membership meeting is just around the corner - Tuesday, September 4th, the day after the fair closes. As I mentioned earlier, we'll start at 6:30pm for anyone who would like to go through the hives at Oregon Ridge (look for the smoke!). Come at 7:00 for bee talk and to look at the library. The meeting starts at 7:30 and you'll be on your way home by 9:00. We'll talk about treating and feeding your bees among other things. Hope to see you there. Finally, I would like to ask anyone who has worked at the fair to help us evaluate our presence at the fair - How did we do? What could we do better? Did you see or experience any problems? Do you have any suggestions? I have a short evaluation form I will pass out at the meeting or will gladly send to anyone who would like to comment. Your suggestions and participation is what helps us evolve as an organization. As a member of CMBA, you ARE the organization, so please comment. See you soon. Good beekeeping to you!

The Honey Bee Hardsell

On Selling Beehives To New Neighbors

By Gwen Rosenberg

Reprinted from Bee Culture July 2007

I recently moved away from the bucolic and oh-so-quiet-rural setting of Medina County, Ohio. Think horse pastures, open spaces and nice wide berths between houses, compared to the hectic, no-live stock-allowed, sardine can, big city of Kent, Ohio. Sure, Kent sounds like a quaint little college town in the Midwest. And I suppose for the most part it is, with it's little gazebo, train tracks and old train-station-turned-restaurant, the "Pufferbelly." (Honestly, who in their right mind eats in a restaurant on the mighty Cuyahoga River called the Pufferbelly? But I digress.) We haven't yet unpacked all our junk from the crinkled boxes in the garage and already I sense a difference in the air and a strangeness to the people here that I didn't encounter in Medina. For one thing, everyone I've met here has a Ph.D. which is pretty annoying. But I'm careful not to offend my new neighbors because there's still one family member, or rather 50,000 family members, who have yet to complete their move and I'm a little afraid that our uber-educated new neighbors might find us suddenly annoying. Before I unpack another trinket I must convince these people not to swarm the zoning board when my honey bees take up residence on Rockwell Street. Luckily, I have a doctorate in what I call "sales-ology", and am willing to share my personal style of persuasion, manipulation and outright deceit with you. A little investment in some sales training now could protect you from a brush with the dark side of the zoning commission in the future.

Oh yes, Mr. and Mrs. Honey bee are scheduled to arrive any day now and things around here could get pretty interesting to say the least. My first tactical strike was to ally myself with my closest neighbors by any means necessary. The closest neighbor to my West was a real cake walk since he is a horticulturalist turned geologist who, as it seems, has always wanted to keep honey bees. He's delighted with our arrangement in which he gets to keep any swarms that land on his side of the fence. Considering my wintered-over hive of Carniolans, he should feel quite satisfied, if not overwhelmed, with the number of swarms he's about to claim. His wife is equally amenable and we've become quite good friends (more of making friends later). A strong ally in a neighborhood cannot be overemphasized. The neighbor on the East side of the house is an archeologist, of course, because no one around here is content to be a nurse, mailman or used car salesman. The approach I took with him was pseudo-intellectual sneak attack of sorts, emphasis on the pseudo, something I learned in my used car salesman days. It starts with a simple conversation in which I get him to agree to a lot of general statements, then impress him with my intelligence or total lack thereof, and close the deal. Our first meeting went a little something like this: "Wow, archeology that's a really interesting field isn't it?"

"Why, yes it is."

"I've always been fascinate by ancient civilizations and bones and shards of pottery and all that stuff. In fact, I always admired that guy who came up with that Piltown man hoax. Ya, think if I wired an old dog skull with a ground hog jawbone I could convince anyone it was the missing link?"

"Uh"

"You know, I consider myself a bit of an amateur archeologist of sorts. The honey bee for example is a fascinating little insect that goes back quite a ways. Some smart guy even found a cave with drawings of a bee tree in it- How about that? I'm sure you know all about bees in your line of work-Don't you?"

"Yes, well, no ... I should probably go now."

"Wait, I brought you a jar of honey. You like honey don't you that's an ancient food isn't it?"

"Well, yes, I suppose it is, but as I told you I study mostly prehistoric new world populations dating back to about 10,000 B.C. so that really predates"

"Well, the reason I ask is because I'm a beekeeper and"

A little investment in some sales training now could protect you from a brush with the dark side of the zoning commission in the future.

"Beekeeper? Where are your hives?"

"Well that's that thing, see, I'd really like to put them in the yard so I'm going to try to bribe you with all the honey you can eat in exchange for your silence in the matter. How's that sound? Pretty good deal for you,

I'd say."

"Oh, that's all you want. Go ahead. Hey, how about in addition to the honey you never try to engage me in a discussion of archeology again, and you keep all the hives you want O.K., Helen?"

"It's Gwen, and you've got yourself a deal."

That's pretty much how our first conversation went. Total success. Boy, if I could bottle that kind of persuasion and total lack of personal dignity I'd be a very rich woman. Since our initial somewhat awkward meeting we've really hit it off. It turns out he travels out of town pretty often, and he needs someone to retrieve his mail and newspaper collection from the driveway. Talk about your tit for tat-no wonder he was so eager for the bees to take up residence.

This move has turned out to be a great opportunity for me to flex some of my sales muscle that has gone unused since I've been staying home with the kids. My next opportunity was small game. The neighbor at the corner whose house does not have any view into my backyard, so I consider him to be a low level threat, stopped by one afternoon. He attends graduate classes, no doubt on his way to doctorate-ville. His wife, who already has a PhD. is on leave while she writes a book about something I know nothing about. Initially, I had not considered this particular family threatening enough "to go into the whole beekeeper sales pitch, but since he rang my doorbell I figured I'd work a little magic on him too. It turns out he stopped by the house to borrow some cornstarch. Did I tell you this was a really odd town. Well, I for one am never without cornstarch, and after it was discovered that we both read the same magazine article about fried tofu, I resorted to the old "we have so much in common" strategy. Generally speaking, the husband of a university professor who makes fried tofu is a creature with some predictable habits. They don't call me the " profiler" for nothing - and this is undergrad 101 stereotyping. I knew right away to go for the 01' one- two punch of the New York Times and NPR.

"Here's the cornstarch and a jar of honey, in case you wanted to try the baklava recipe in the New York Times Food section on Wednesday."

"Local Honey? Very cool, are you a beekeeper?"

Yes, sir, an organic beekeeper in fact." (Remember these are tried and true tactics to the successful salesperson not a treatise on ethics) "Did you catch that little blurb on NPR the other day when they interviewed that Ohio beekeeper about his new book? Yea, that guy is a great friend of mine." (Ok, so I may have asked him a question once at a bee meeting.)

"You should really look into selling your honey at the food co-op downtown. Hey where do you keep your hives?"

"That's a great idea, I'll have to look into that co-

op. Here's your cornstarch and honey. Take another jar why don't you and let me know if you ever need a sitter. Please tell your wife I'd love to check out a draft of the historical text/ case study / novel she's writing. I consider myself quite the literary type, you know."

Another satisfied customer. I can see a real improvement in my ability to shove honey into peoples hands while utterly distracting them from the suspicious buzzing coming from the pickup truck that has just pulled into my drive.

There are two houses on the street that I have ruled out of even attempting to engage. Neither one has a view over the newly constructed privacy fence, and I plan to employ a more sinister plan to keep them from talking. A little re-con mission on my part has revealed that in the house directly across the street resides two young women with voracious appetites for beer and some volume control issues when it comes to rap music. I don't plan on ratting them out to the coppers, if they mind their own business, see, and we'll all get along just grand, see. The other house is a college rental and anyone who has ever dealt with a college town landlord knows the apathy runs deep, and the cops will come every time you call.

With the West side of the street covered, I can now turn my focus on my biggest threat. This family is going to be a toughest sale yet. My backyard abuts against a lovely single family two-story colonial complete with a mega-playground in the backyard. It is no exaggeration that this playground cost more than the value of both my cars and the contents of my home combined. People who invest this much money in jungle gyms do not enjoy the thought of their little darlings having any direct contact with any of the hymenoptera clan. These are the people who call yellow jackets "bees." Not to worry dear reader, I won't be beaten. I have already enacted a full scale multigenerational assault that will test my skills as a salesman, a sleuth and a pied piper of sorts. Step one, I sent my son as a scout to play with their children in the hopes that he will be able to lure them into my yard. Once I snare them, I plan to ply the tikes with honey. Then when the sweetness of the honey clouds their instincts, I'll delicately begin the process of brainwashing the little urchins into accepting the thought of masses of flying, stinging insects. While initial attempts have thus far failed, I have regrouped and am now pursuing a different tactic or shall I say "insurance policy." I've entered my children into a playgroup with a nearby, but out of flight path, family whose two incomes are derived from successful legal practices. Needless to say, my newfound friends are practically drunk with free honey.

This playgroup business is practically made for the coercive sales practices I'm endorsing. All these moms get together, shoot the breeze, make nice nice and whammo! They're your friends, and friends don't

call the zoning board on people who stock their pantries with honey. Every neighborhood has it's villain. In this case it's not the generous beekeeper, but the family hassling the beekeeper. I have even undertaken a shotgun approach to this community bribery by volunteering at my son's school. The school is a short walk from my house so I know that some of the would be child-spies attend this very institution. Child-spies are very dangerous to beekeeping so it's important to take the offensive. Young kids are normally allied with their parental unit, but I've employed a little preemptive assault of my own to ensure their allegiance to me. Kids love bees, and they love them even more when I'm done with my beekeeping demo and all-you-can-eat honey buffet served up in the classroom. I'm already scheduled for the kindergarten class next week, and I plan on infiltrating the remaining grades in the coming months. From neighborhood pariah to "the nice lady who came to my class" here I come.

I have no plan of stopping there. I plan on embedding myself in this town like foul brood – they'll never get rid of me or my bees. I've already stopped by the town hall to collect a little information on the zoning meetings and more specifically the elections (insert maniacal laughter here). It all comes down to what I said about applying a sales mentality to getting the neighborhood to accept you and your bees by default. A little linguistic flexibility and a lot of free honey and you can keep your bees anywhere - even a town like Kent.

Insecticides And CCD

“...and what about the neonicotinoids?”

By Malcolm T. Sanford

Reprinted from Bee Culture July 2007

Last month I discussed the rationale for pesticides being implicated in colony collapse disorder (CCD), specifically a new class of chemicals that is being implemented widely by applicators called neonicotinoids. The lead compound for this class is imidacloprid. It and its derivatives are extremely effective on insects, attacking specific nerve targets (nAChR), but relatively benign on mammals (humans, dogs and cats).

Because they are so specific for insects, however, means that honey bees could be readily affected by neonicotinoids. The first indication of this was in France, when beekeepers noticed an extreme decline in their colonies in sunflower fields. The Syndicat National d'Apiculture, Syndicat des Producteurs de Miel de France, and Union Nationale d'Apiculture Francaise issued a joint statement in Paris, 18th December 2000, which contained the following preamble:

"A press communication dated 16th December 1998, produced by the Minister of Agriculture and Fisheries, announced that: The commission (Commission de toxiques) charged to evaluate the

impact of Pesticides have studied the dossier 'GAUCHO' (Imidacloprid - BAYER). Following these studies, it has published the following advisory comment.

'Taking into account recent studies evaluating the impact that Imidacloprid could have on the activity of bees when used as a seed treatment for sunflowers', the Commission des Toxiques during its meeting held on the 16th December, 1998 considered that:

'The examined data does not allow for a conclusion of indisputable effect of imidacloprid or its metabolites on bees and the production of honey.

'Inversely, it is not possible to totally exclude the effect of imidacloprid and its metabolites, taking into account the toxic effects of minute doses, doses that are in keeping with those concentrations potentially present in the plants during the period of harvest.

'That complementary study should be undertaken to clarify the following points:

1. The metabolism of the product in parts of the plant accessible to bees.

2. The limit of the toxicity of the product and its metabolites for bees and the quantities present.

3. The persistence of imidacloprid in the soil and the presence in crops that have not been treated."¹

A demonstration in Paris by beekeepers associated with the above statement led to the pulling of the label for Gaucho®, the first and only time this has occurred to my knowledge.

This and other reports and investigations have led to numerous reflections on imidacloprid and its relatives. Graham White in the United Kingdom provides a rather complete synopsis of his analysis with many good references via the British Beekeepers Association Web Site:²

"My concerns are threefold:

"As a beekeeper I am concerned that we are beginning to see evidence of unusual collapse of bee colonies in the UK.

"As a conservationist I am concerned that the large scale use of this highly toxic, systemic and persistent insecticide in the UK is effectively sterilizing fields of all soil-invertebrate life including: earthworms, beetles, ladybirds, butterflies, moths etc. This has profound ecological implications, especially for insectivorous birds and mammals.

"Imidacloprid is highly persistent in the environment and is absorbed into all parts of the crop-plant: pollen, nectar and seeds. If collected by bees it is progressively concentrated in honey as the nectar is evaporated. It seems likely that it will be present in sunflower and rape-seed oil, - even if in small quantities. As a neuro-toxin this may have implications for the food chain and human health."

He concludes: "Currently there is growing concern in the UK about the unexpected collapse of bee colonies in Summer (a time when they normally thrive) and a

sporadic incidence of failure of queen bees to mate or prosper. As yet the evidence is anecdotal and a national survey/study is urgently needed but if the pattern follows that observed in Sweden, France and Canada, it seems a reasonable hypothesis that imidacloprid may be a causal factor. Imidacloprid is a systemic insecticide which attacks the nervous system of all invertebrates; the target pests are flea beetles and wireworms etc but beneficial species such as bees, earthworms and beetles are also killed. The pesticide is dusted onto seeds before they are planted and is used on a worldwide scale on crops including: sunflowers, oilseed rape, potatoes, wheat etc."

Unfortunately, the evidence is mixed on imidacloprid's presence in plants honey bees might use for forage. In one Canadian study:³

"Kentville, N.S., March 8, 2002. A collaborative research project recently found that imidacloprid (Admire®) was not found in pollen and nectar of wild flowers and clover flowers in years following an in-furrow application of the product.

"The research project was undertaken as a result of a question raised by beekeepers whether imidacloprid or its plant metabolites was the cause of the dwindling bee populations reported by beekeepers in Prince Edward Island and other areas. Admire® is a popular insecticide for control of Colorado potato beetle and other insect pests in potatoes.

"Results of the Imidacloprid Residue Study were presented to the Canadian Honey Council and the Canadian Association of Professional Apiculturists in Banff on January 30, 2002." The principal investigators were Jim Kemp and Dick Rogers.

They concluded: "Our answers to the question are based on determining the residue levels in parts per billion after imidacloprid was applied in-furrow. Measurements were taken in the current year and the first and second year after application. Imidacloprid and its two main metabolites (hydroxy and olefin forms) were not found in clover flowers and wildflowers, bee collected pollen and nectar, and uncapped honey. Residues can be measured when they are at or above the detectable limit of two parts per billion.

"The study took place during the Summer of 2001 in PEI and New Brunswick. It included sampling and analysis of over 3,800 soil cores, over 8,000 clover leaves, over 2,000 clover flowers, over 480 grams of wildflowers and over 6,000 honey bees.

"The Imidacloprid Residue Study was funded in part by the governments of Prince Edward Island and New Brunswick, with major funding by Bayer Inc. Additional partners and collaborators in the study included the Agriculture and Agri-Food Canada Research Branch, Cavendish Farms Research division, Jasper Wyman & Son and the potato growers and beekeepers of the Maritimes."

A study by a team of French scientists "describes a

new approach to assess more specifically the risk posed by systemic insecticides to honey bees with the example of imidacloprid (Gaucho®). This approach is based on the new and existing chemical substances Directive in which levels of exposure (PEC, Predicted Exposure Concentration) and toxicity (PNEC, Predicted No Effect Concentration) are compared. PECs are determined for different categories of honey bees in relation to the amounts of contaminated pollen and nectar they might consume. PNECs are calculated from data on acute, chronic, and sub lethal toxicities of imidacloprid to honey bees, to which selected assessment factors are applied. Results highlight a risk for all categories of honey bees, in particular for hive bees. These data are discussed in the light of field observations made on honey bee mortalities and disappearances. New perspectives are given to better determine the risk posed by systemic insecticides to honey bees".

In their discussion, the authors conclude: "The PEC/PNEC derived from the calculation of honey bees' exposure to which appropriate assessment factors were applied show that the risk posed by imidacloprid is alarming for all categories of honey bees. These ratios are all over 1, and greater in adult hive bees than in any other categories of bees. Whatever the validated toxicity data are, the determined PNECs are in a limited range of values (between 1.2 and 50 pg/bee). These estimates are in agreement with observations made in regions of extensive sunflower and maize cultures, which report a decrease in honey production since the launching of imidacloprid on sunflower plants in 1994."

Several beekeepers I have talked to are convinced that neonicotinoids are implicated in CCD. And David Hackenberg, one of the first beekeepers affected by the disorder, has written his pollination customers providing them a list of materials, asking them not to apply any of these substances, and to instead consider alternatives.⁶ Beekeepers might also consider this when planning their control measures for parasitic mites. There seems little question that adding any pesticide to the honey bee's environment puts it and the colony it inhabits at greater peril.

References:

1. www.beekeeping.com/articles/us/gaucho/manifestation_paris_us.htm
2. www.bbka.org.uk/articles/imidacloprid.php
3. Posted on Bee-L April 11, 2007: listserv.albany.edu:8080/cgibin/wa?A2=ind0704b&L=bee&T=O&P=10531.
4. Marie-Pierre Halm, et.al. 2007. "New Risk Assessment Approach for Systemic Insecticides: The Case of Honey Bees and Imidacloprid (Gaucho)," *Environ. Sci. Technol.*, 40 (7).
5. www.extoxnet.orst.edu/pips/deltamet.htm
6. www.beekeeping.com/content/ColonyCollapseDisorderPDF/

IMPORTANT PHONE NUMBERS

David Papke, President 717-246-2339
Steve McDaniel V. Pres. 410-239-7496
Helen Nelson, Secretary 410-833-9535
Bob Crouse, Treasurer 410-265-7999
Jerry Fischer, State Bee Insp. 410-562-3464
Oregon Ridge Nature Center 410-887-1815
Chuck Huselton, Past Pres. 410-592-6598
Lloyd Snyder, Editor 410-329-6671
Editors E-Mail - lrsnyder@clearviewcatv.net

DATES TO REMEMBER

General Meeting – September 4, 2007– at Oregon Ridge Nature Center. 6:30PM

Open Hive Demonstration before the meeting.

The meeting starts at 7:30 PM and the subject is “Secrets of Winter Preparation” but we should call it “How to Keep Your Bees Alive.” A panel of expert beekeepers, including a Master Beekeeper or two, will share their secrets with you.

Board Meeting – September 17, 2007 – 7 PM at Oregon Ridge Nature Center.

Lloyd Snyder – Editor
4747 Norrisville Road
White Hall MD 21161