



BEE NEWS & VIEWS

The Mississippi Beekeepers Association Newsletter

JEFF HARRIS, Editor
Phone: 662.325.2976

March-April 2014

Beginners Workshop in Jackson

By Jeff Harris

The Central Mississippi Beekeepers Association hosted a beginner's workshop on Saturday, March 15 at the Ag & Forestry Museum. Walter McKay started the event with a hands-on presentation of beekeeping equipment and jargon. He was followed by me with several power point presentations related to bee diseases, nutrition and methods for starting colonies of bees from either nucs or packages. The formal presentations were followed by an on-site lunch, which was provided by a local Boy Scout troop.

After lunch, we assembled in groups to learn how to work colonies of bees. This is almost always the best part of these workshops. For some folks, it was the first time that they had ever seen the inside of a hive. The outside activities were very relaxed and informal, and we covered all of the basics including lighting a smoker, the proper way of working a colony of bees and recognizing abnormal colony conditions.

Many of the > 115 participants told me that they greatly appreciated the day with the bees. All of the CMBA members that helped with the event deserve a round of applause for ensuring an uneventful (in terms of things going wrong) and educational experience for new beekeepers. This is almost always the workshop having the largest attendance each year.

Small Farmers and Honey Bees

By Jeff Harris

Dr. Gerald Jones of Alcorn State University asked me to introduce beekeeping to small crop growers and farmers from southern Mississippi. The event occurred at the Jackson Farmer's Market on High

Street on Tuesday, March 25. At least 90 farmers attended the event to learn various aspects of farming and marketing farm products.

I introduced most of the group to beekeeping as a way of increasing fruit set with the pollination activities from the bees. I also explained that honey production could provide added income with some effort of getting extracting equipment and managing the bees for honey production. About 10% of the farmers already had bees and eagerly asked me questions about all aspects of beekeeping. Many of the others expressed an interest in trying to keep bees, and I encouraged them to find the beekeeping club nearest them to learn more about bees and beekeeping.

Beginners Workshop with South-West Mississippi Beekeepers in Meadville

By Jeff Harris

Mike Guice, several other members of the Southwest Mississippi Beekeeping Association, and Allan Keith Whitehead of the Franklin County Extension Office helped me conduct a beginner's workshop at the Franklin County Extension Office in Meadville on Saturday, April 19. We packed that venue with nearly 60 people for the morning session. This event followed a format similar to previous workshops this year. Mike introduced everyone to basic beekeeping equipment and jargon. I followed with presentations that emphasized managing pests and diseases, managing colony nutrition and ways to get started in beekeeping. A wonderful lunch followed with meat entrées grilled by club members and desserts (many made with honey) baked or made by other club members.

After lunch, we visited a local apiary where we split into groups and learned how to work bees. The weather was beautiful, and all participants seemed to have a good time. I did see a couple of stings, but generally, the bees were well behaved. This was a fun group, and I look forward to visiting them again next year (if not sooner).

Honey Bee Gardens

By Jeff Harris

Dr. Geoff Denny (Assistant Professor in Plant and Soil Sciences at Miss. State University) asked me to discuss gardening for pollinators and honey bees on the main campus in Starkville on Saturday, April 26. We met at the old enology (wine making) lab near the North Farm.

I have little gardening experience myself, and when I have planted; my emphasis has always been on providing hummingbirds with adequate food plants. However, my research associate, Audrey Sheridan, educated me recently on various aspects of gardening for bees and other insect pollinators. She and another technician have maintained a pollinator garden at the Clay Lyle Entomology Building for many years.



Section of the pollinator garden at the Clay Lyle Entomology Building.

I began the discussion with a short presentation on the basic biology of honey bees. I emphasized the importance of poly-floral diets in providing bees with the broad diversity of nutrients (amino acids, sterols, and vitamins) from the different pollens available to them when many different flower species are blooming simultaneously or in

succession. The talk then shifted to basic considerations of planting gardens and the types of plants that appeal to bees (and those that provide the best nutrition for honey bees). I used Audrey's power point slide set on this subject as part of my presentation.



A water feature (shaped like a skep hive) provides the soulful sound of a waterfall, but more importantly it can provide a drink for thirsty bees.

After the formal presentation, many of the participants followed me to Clay Lyle where we wandered around the pollinator gardens. Many of the plants were in full bloom, and various species of bees, flies, and butterflies were visiting the flowers. It was another beautiful spring day, and the participants seemed to enjoy actually seeing a well-established pollinator garden.



Poly-floral gardens provide a diversity of pollens that make them nutritionally ideal for honey bees and other pollinators.

Lowndes County Beekeepers Chat About Bees

By Jeff Harris

Reid Nevin of the Lowndes County Extension office invited me to his office in Columbus, MS on Tuesday, April 29, to discuss bees with his local beekeepers group. His request was a bit unusual in that he did not want a formal presentation from me. He simply wanted me to be there to ‘chat bees’ with his club members. Reid had cooked a wonderful chicken dinner, and we simply gathered around a table to eat, socialize and talk about beekeeping. Many people came armed with questions, and I answered questions over the next couple of hours. I greatly enjoyed this type of interaction. It fits my lazy side in that my preparation for the meeting was easy. However, I also felt that many of the beekeepers liked the openness of our communication and enjoyed the fact that the discussion was free to wander through all aspects of beekeeping. I should do more of these kinds of meetings!

The Curious Case of the Collapsing Colonies

By Peter Loring Borst

“For pity’s sake, Watson, what are you parading about in a clown’s outfit for, like some *Pierrot*?” Holmes chided. “You have squandered untold yards of linen on that tent you are sporting.”

“It is my own invention, Holmes,” I countered. “I am quite pleased with it.” I held out its voluminous arms, showing its various features, including deep pockets. There were no openings where the tiny demons with their ready stingers could enter in. “You must be near suffocation, by now. What of comfort, Watson?” he parried, puffing upon his *Imker Pfeife* and blowing little clouds of cool smoke over the scurrying honey bees.

“Let me pose the question to you, my friend. Are you comfortable handling your bee hives in your daily garb?”

“Well yes, now you mention it.” He held up a frame, letting the sun’s rays stream into the cells to illuminate their contents.

“Well so am I, wearing this beekeeper’s suit, as I call it. I believe it will be widely adopted in the near future.”

“We’ll see about that, Watson. I have very strong doubts. It is plain that bee-keepers are born, not made. But never you mind, what do you make of this?” He pointed to some ruby red pollen that the bees had neatly packed into the honeycomb cells. “What sort of flower produces pollen of this ruddy hue?”

“Holmes, you may be quite certain that if you do not know the answer to that, then you will not be obtaining it from me. Let us examine the flora in the vicinity.”



Later, back at the parlour, Holmes lit up his cherry wood pipe and rested contently, pondering the information gleaned from the day’s visit to the hives. Well into summer, the hives had wrested an ample hoard from the stingy blossoms of the season. Suddenly there came a persistent knocking at the door.

I opened it to see a singularly outlandish character standing at the threshold, garbed in some costume of the American West. He was clad in denim, riding boots, and wore some variation of the Stetson hat. I let him in, and he began to speak with a pronounced American accent.

“Which one of you is Sherlock Holmes,” he said. I pointed to my companion.

“And with whom do we have the rare opportunity to be acquainted?” Holmes asked, obviously amused at the visage of this comic foreigner who had chanced upon our cottage in the country.

“My name is Mackintosh, from the U S of A. You will find it hard to believe what I am going to say, but here it is. I have come here from the twenty-first century to get your help on a very serious problem we are having. Von Dusseldorf has been on this for years and has got nothing to show. The government boys and even Dr. Tannebaum have their so-called hypotheses, which aren't worth a handful of bee wings...”

“Wait there, my esteemed American visitor,” interrupted Holmes. “You are expecting us to swallow whole this tale of time travel from a century hence, with not one speck of corroboration?”

I thought for a moment, and then added generously: “Not to worry, Holmes. This is a work of fiction. Perhaps such a plot twist will work here. It's worked for Mark Twain.”

“Just a minute,” Mackintosh said, and produced a small leather billfold from his uncomfortable looking denim trousers. From this he extracted what appeared to be a calling card, which had a likeness of his face, done up in lurid colors. It did have his name upon it, and some odd cryptograms. He offered it as evidence for his contention that he was from the year of Our Lord two thousand and thirteen. Undoubtedly, such an artifact could be manufactured at any time or place, but our curiosity began to overwhelm our incredulity.

“This is my driver's licence. It has my date of birth on it and my place of residence.”

“You are suggesting that where you live, people are required to obtain licences to drive? Next you will aver that the horses are licenced to trot! Your story increases in its strangeness.”

“No, we don't use horses any more. We have trucks – that is, we have motorised vehicles to do the work you folks did with horses and wagons,” He continued: “I know it's a lot to take in at once, so let's just stick to the facts. Beekeeping got a lot

harder in the twentieth century. Where in your time folks could make a decent living and raise a family with a few hundred hives, it has reached the point where thousands are now required to earn a respectable living.”

“If I might observe, Mr. Mackintosh, you have not even told us what this case is about. Perhaps you would find the patience to bring us up to date, though we seem to be one hundred years behind you. But surely, bees have not changed measurably in that short of a span of time?”

“That may be so, Holmes. But we have a whole bunch of other problems. You see, there are a lot more people in the world now and you can travel across the globe in hours, not days. And whatever problems they have in China or Africa, we have in Europe and the U S of A. So, about twenty years back – that is forward – well, never mind. We got this bug from Asia, we call it Varroa.”

“Varro?” I asked, not quite being able to follow him, with his odd American accent. “The Roman scholar?”

“No, it's varro-a. It's a bug, like a tick. But it makes the bees sick. Anyway, we thought we had her licked, with chemicals and all, and then the bees just started to vacate the hives. Oh, we had seen bees leave the hives before. Lots of times, they just get sick and die off. But this appeared to be different. The hives looked pretty good, good brood, honey and all. But most of the bees were gone. Like somebody had come along and shook the bees out of them. Well, we hadn't seen this before, so we got the state guys, including Von Dusseldorf, to take a look at it. They couldn't make heads or tails out of it either. Darnedest thing, I tell you.”

“I must say,” Holmes began, “You Americans haven't changed much. You are always at the end of your tales. You have no patience for the details, the circumstances. What good is a punch line, detached from the telling of the joke? Given the proper build up, a humorous anecdote can be finished with one line. But that line, by itself, won't mean much. But to begin, where are these hives located?”

“Well, that's just it. We move them around the country. In Florida for the winter, trying to get some

orange blossom honey. North in the spring to pollinate apples, then cranberries. Far north as Maine to pollinate blueberries. Heck, some even go out west in February for almond pollination.”

“Now, let me get this straight. You travel the equivalent of from southern Spain to Scotland, and perhaps Greece, as well? No wonder the bees have had enough. They are probably departed for a more quiet life style, like myself.”

“No, that’s not it, because only the field bees go. The queen is left with untended brood.”

“Sounds suspiciously like the Isle of Wight disease. You have heard of that, haven’t you? Until we made good use of the microscope, no one could put a finger on what was causing that. We narrowed it down to a tiny mite in the trachea. Good detective work done on that one, I must say.”

“Yeah, tracheal mites. You can kill them with menthol. But this varroa is a harder one to beat. But even so, we have gotten pretty good at keeping them down. So I don’t think that’s it. I figure it’s chemicals that are being used on the crops.”

“But then, why do you come to me for help?”

“Can’t prove it. We need an expert to prove it for us.”

“I must say, it is a curious case. Have you examined the bodies?”

“That’s just it. No bodies. They fly off and can’t be found. Millions of them!”

I couldn’t help interjecting: “There ought to be a very large pile of dead bees somewhere, we could examine.” Holmes raised his hand as if to bring the conversation to a halt.

“Let’s go there,” he said.

Soon the party reconvened in the twenty-first century. It appeared to be some sort of eating establishment brightly lit and gaudy, The walls, the floor, even the table tops were outlandishly coloured. We found ourselves seated at a table, surrounded by gentlemen in Western attire. I had on

my white linen beekeeper’s outfit, in case we had to open up any of the American hives. Holmes was in his usual morning suit. He pulled out his pipe and prepared to light up. Mackintosh spoke: “You can’t smoke indoors any more, Mr. Holmes,” he said. “Let me introduce you to some of the large beekeepers.”

I must observe here that the size of these gentlemen was impressive. They appeared to have been consuming very large quantities of maize. Introductions were offered all around, it seemed to be a fine representation of the beekeepers from the central portion of the country. I believe the location was somewhere in the state of Missouri. One of the large beekeepers asked about Holmes and myself. Mackintosh offered: “I brought these two experts from last century England, to see if they can determine the cause of death in the case of colony collapse.”

“A hundred years ago? Mack, what do you think this is? Back to the Future? Who is the guy in the white outfit? Doc Brown?”

“No, that’s Doctor Watson, and this is Sherlock Holmes. These are the best investigators I could think of. Let’s look at the evidence.”

We reconvened in a sizeable apiary. I was certainly glad to have on my bee-keeper’s suit. Though, much to my dismay, none of the gentleman were wearing them. I was sure that it would become commonplace among the beekeepers. They all had on the same denim trousers, riding boots, and variations on the Stetson hat. Holmes’ beekeeper’s pipe seemed pathetic when surrounded by hundreds of American style beehives, which they were avidly smoking with large canisters.

The hives were several feet wide, appearing to house multiple colonies. Holmes queried about the odd manner of housing, somewhat like the Swiss style of bee houses, though it appeared that they were using many small houses rather than one large one.

“Yeah, these bees are on pallets. We don’t move hives one at a time any more. Six colonies go on a pallet, and you can put six hundred on a truck. If they’re not too heavy. We try to keep them light by

using one box for brood and then a queen excluder. That way you can strip off all the honey before you move them, and get more on the truck.”

“And then they starve to death?” Holmes offered.
“No, as soon as they hit the ground down south, we’ll pump the corn syrup to them. They perk right up on that.”

“Sounds positively barbarian,” I suggested.
“Come on you guys, let’s get back to work,” said one of the large beekeepers. We began to take hives apart, American style. They seemed prosperous enough.

“See here, the problem is, they build up real good, make some honey and then collapse. The so-called experts have cooked up all kinds of theories, but none hold water. Varroa, nosema, virus, you name it. We have had all this before. What’s changed?” the large beekeeper continued.

“I’ll tell you what’s changed,” said Mackintosh.
“Neo-nicotine.”

Holmes perked right up. “What sort of nicotine? Do you have any I can sample?”

“It isn’t tobacco. It’s a chemical that they put on the seeds and then the whole plant has it, leaves, pollen and all,” he said, pointing to a nearby field of maize.

You see Holmes, we are growing corn for many things now. They make corn syrup by converting the starch to sugar, and they make ethanol by fermenting the corn syrup. Like I said, we even feed it to the bees.”

By now, Holmes was no longer paying attention. He had some sort of book in his hand and he was quite captivated by it. He called me over.

“By Jove, Watson, look at this! You can get any information you want from this thing, instantly. You just type a word into it, and it tells you all you want to know. Gentlemen, why do you not ask this thing your question? It seems to know everything.”

“Oh no, he’s discovered the internet. We’ll be here all afternoon, and we’ll have nothing to show for it.

There is more BS on the internet than anywhere else.”

“Things haven’t changed that much, by the sound of it,” I offered. “Never got anything useful from the newspapers back in our time, either. A bald faced lie is concocted and then repeated so many times everyone believes it. Come away Holmes.” Too late, he was already searching for a place to buy tobacco.

Later that same day we decided to reconvene at a local drinking establishment.

“Very puzzling case,” says Holmes. “It appears we have many suspects, many motives, and no conclusions in view. Still reminds me of the Isle of Wight case.”

A crowd was beginning to form around us. The first to speak was Peter Neumann, from the Swiss Bee Research Centre: “Sober reassessment of the Isle of Wight Disease many years later led to the conclusion that the disease had been due to a combination of factors, in particular, infection by chronic bee paralysis virus -- completely unknown at the time -- together with poor weather which inhibited foraging, and an excess of bee colonies being kept for the amount of forage available.”

“I still think it’s pesticides,” Mackintosh urged. “They didn’t have modern insecticides a hundred years ago.” Bill Wilson, of the USDA, stepped in at that point:

“Why are pesticides so often listed as the primary cause of dwindling/disappearing-bee problem? In the past, people have been inclined to ‘think’ pesticides, often without thoroughly investigating all aspects of the bee losses. In fact, if an inspector’s repertoire of bee experience does not contain information of Disappearing Disease, the loss would be diagnosed as pesticide-related on the basis of the general signs and symptoms. What else fits the situation except pesticides?”

“We don’t seem to be getting anywhere, Holmes. Maybe we should call in Inspector *Pierrot*,” chided Macintosh. “He sort of picked up where you left off.”

A voice from across the room rings out: "It's Poirot, not *Pierrot!* You already have a clown." The gentleman, with measured steps, came over to join us.

"Hercule Poirot at your service. I don't believe we ever met, but your reputation Monsieur Holmes is worldwide. This does remind me of a similar case. I was traveling on a train - the Orient Express n'est pas. A dastardly murder took place in one of the sleeping cars. Initially, I suspected an unidentified interloper who performed the act and escaped unnoticed. But my attention it turned to passengers on the train. We had thirteen suspects, any one of them could have dispatched the victim. In the end, I decided that under the circumstances none could be blamed with any certainty, since the victim could have survived any of the injuries, but also could have been already dead at any point, leaving some of the perpetrators assaulting a corpse. In the end, we went with the original explanation, leaving the crime unsolved."

The End

Peter Borst has worked in the beekeeping industry since 1974. Since 2006, he has been a regular contributor to the *American Bee Journal*, writing on a diverse range of topics. Currently he is a Lab Manager in the field of Reproductive Genomics at Cornell University. (to be published in an upcoming issue of *Bee World*)

Song of the Queen Bee

(As first published in the *New Yorker*, 1945)

When the air is wine and the wind is free
and the morning sits on the lovely lea
and sunlight ripples on every tree
Then love-in-air is the thing for me
I'm a bee,
I'm a ravishing, rollicking, young queen bee,
That's me.
I wish to state that I think it's great,
Oh, it's simply rare in the upper air,
It's the place to pair
With a bee.

Let old geneticists plot and plan,
They're stuffy people, to a man;
Let gossips whisper behind their fan.
(Oh, she does?)

Buzz, buzz, buzz!)
My nuptial flight is sheer delight;
I'm a giddy girl who likes to swirl,
To fly and soar
And fly some more,
I'm a bee.
And I wish to state that I'll always mate
With whatever drone I encounter.

There's a kind of a wild and glad elation
In the natural way of insemination;
Who thinks that love is a handicap
Is a fuddydud and a common sap,
For I am a queen and I am a bee,
I'm devil-may-care and I'm fancy-free,
The test tube doesn't appeal to me,
Not me,
I'm a bee.
And I'm here to state that I'll always mate
With whatever drone I encounter.

Mares and cows. by calculating,
Improve themselves with loveless mating,
Let groundlings breed in the modern fashion,
I'll stick to the air and the grand old passion;
I may be small and I'm just a bee
But I won't have science improving me,
Not me,
I'm a bee.
On a day that's fair with a wind that's free,
Any old drone is a lad for me.

I've no flair for love moderne,
It's far too studied, far too stern,
I'm just a bee---I'm wild, I'm free,
That's me.
I can't afford to be too choosy;
In every queen there's a touch of floozy,
And it's simply rare
In the upper air
And I wish to state
That I'll always mate
With whatever drone I encounter.

Man is a fool for the latest movement,
He broods and broods on race improvement;
What boots it to improve a bee
If it means the end of ecstasy?
(He ought to be there
On a day that's fair,

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Oh, it's simply rare.
For a bee.

Man's so wise he is growing foolish,
Some of his schemes are downright ghoulish;
He owns a bomb that'll end creation
And he wants to change the sex relation,
He thinks that love is a handicap,
He's a fuddydud, he's a simple sap;
Man is a meddler, man's a boob,
He looks for love in the depths of a tube,
His restless mind is forever ranging,
He thinks he's advancing as long as he's
changing,
He cracks the atom, he racks his skull,
Man is meddlesome, man is dull,
Man is busy instead of idle,
Man is alarmingly suicidal,
Me, I am a bee.

I am a bee and I simply love it,
I am a bee and I'm darn glad of it,
I am a bee, I know about love:
You go upstairs, you go above,
You do not pause to dine or sup,
The sky won't wait ---it's a long trip up;
You rise, you soar, you take the blue,
It's you and me, kid, me and you,
It's everything, it's the nearest drone,
It's never a thing that you find alone.
I'm a bee,
I'm free.

If any old farmer can keep and hive me,
Then any old drone may catch and wife me;
I'm sorry for creatures who cannot pair
On a gorgeous day in the upper air,
I'm sorry for cows that have to boast
Of affairs they've had by parcel post,
I'm sorry for a man with his plots and guile,
His test-tube manner, his test-tube smile;
I'll multiply and I'll increase
As I always have---by mere caprice;
For I am a queen and I am a bee,
I'm devil-may-care and I'm fancy-free,
Love-in-air is the thing for me,

Oh, it's simply rare
In the beautiful air,
And I wish to state
That I'll always mate
With whatever drone I encounter.
--E.B. White



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