

SWEET TALK

The newsletter of the Greene County Beekeepers Association

BEE Aware-- Odds and Ends:

Bill Starrett

Many of us have now harvested our honey for the season and are beginning serious preparations for wintering our hives of bees. A large population of bees is a first step in that preparation and it begins any time after summer solstice (June 21). Queens produced after the summer solstice have a biological clock that causes them to continue laying eggs later into the fall than queens produced prior to the summer solstice. For that reason requeening in July and August helps guarantee a large population of young bees. Whether you purchase queens or raise your own now is the time to consider doing it.

All beekeepers should learn to produce their own queens from their own hives in addition to maintaining a nuc in each apiary for an emergency backup queen. The best queens are produced in strong hives so there is a large contingent of nurse age bees to provide proper nourishment, never in weak hives or nucs. This can be done simply and easily without the scary proposition of finding and removing the queen.

The first step is to get all the nurse age bees into one hive body where a new queen will be produced. That can be accomplished by shaking or brushing all the bees off all the open brood and putting those frames above a queen excluder with at least one frame of honey and pollen. This will ensure the queen is not in the hive body above the

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**The Place to Bee on
Tuesday, July 19 at 6:30 p.m.**

**GCBA Annual Picnic at the
Parks & Trails Shelter by the Xenia Fair-
grounds**



**Bring your own place settings and beverages
(plates, cups, flatware, napkins)
and a dish to share.**

GCBA will provide the entree

**We need a headcount, so please contact
Jeannie Doe at [REDACTED] or**

by Friday, July 15th to make your reservations!

Plus—A Silent Auction

*We have some great items on the table!
Donations of auction items accepted*

President's Letter

What a good time we are going to have at the Picnic on July 19th! Good food, an auction and our own Bill Starrett giving a short talk on re-queening.

Bring a side dish to share and/or a dessert to the picnic. Please email Jeannie Doe (see contact info on front page) you will attend so we know how much meat to cook for you. We will be at the Greene County Fairground starting at 6:30.

I want to thank everyone who generously provided refreshments to our June meeting. You all have been faithful to provide this service to our members. Thank you for volunteering. It makes a big difference when everyone helps out.

July 9th Honey Harvest: A big thank you for all who helped make this a great community outreach. It is a lot of work, but made easy by all you who were able to pitch in. Thanks!

July 19th is our annual GCBA picnic: Bill Starrett will be presenting a small talk on the advantages of re-queening as a method of increasing hive health. I am sure you will want to hear what he has to say. This is the time to take action on many issues so the hives will have time to build up for winter. Remember the auction....some good deals to be had on bee stuff. Please bring your donations to be auctioned off. Your excess will help get someone else get up and running.

Well, the farm is transitioning rapidly; the nectar flow has all but stopped. Many of the large nectar sources have played out. What happens next is that robbing starts in earnest. Hives become a little cranky. If you have a hot hive that becomes really nasty, you may put a little tobacco in your smoker to take them down

a notch. A little will go a long way. I have never had to do this, but have heard that it is very effective.

What is happening in my bee yard? Robbing has been an issue. To combat robbing, I combine weak hives. Reducing the entrance size on Nucs also helps me control robbers

. Another big push has been to harvest honey. Honey taken earlier had lower moisture content so was ready to extract right away. Some of the current honey has higher moisture content, and so I placed the supers in a room with a de-humidifier to lower the moisture before I spun it. This method worked for me and keeps the honey in the acceptable range. If you do not have access to a refractometer to measure your honey, bring a small sample to the picnic. We will have some refractometers there to measure for you.

It seems that the spring season up to June is the fun time, as everything seems to work easily. Now proper techniques are a must as old queens start to slow down, robbing by everyone starts in earnest and mite counts go thru the roof. All must be addressed so that our hives are strong for the winter. I suggest you monitor a lack of honey closely. If the hives start to get light, feed now until the goldenrod flow starts this fall. This is the time frame I have lost several hives in the past, because I did not feed. I am a big fan of late summer feeding.

Looking forward to seeing you at our annual picnic meeting.

Dave Allen

GCBA 2016 Board Members:

President:	Dave Allen
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Secretary:	
Treasurer:	Tom Davidson
Communications:	Terry Lieberman-Smith
Webmaster:	Dan O'Callaghan
At-Large:	Fran Davidson, Jeannie Doe, Joe Valentour
Past President	Dan O'Callaghan

What's Bloomin'



Nectar Sources: Basswood (American Linden), Yellow Sweet Clover, White Sweet Clover, Milkweed, Mints, Bergamot, Loosestrifes, Vetches,

Nectar and Pollen: Catalpa, Bramble fruits, Roses, Coneflowers, Ohio Buckeye, Rudbeckia, Thistles,

Pollen: St. John's Wort

Treasurer's Report

Beginning Balance 1 July	\$3848.78
Speaker fee Ck 1093	-\$100.00
Dues	<u>+ 15.00</u>
Ending Balance	\$3733.78

Basic Buzz in the Beeyard

July

- Remove comb honey supers when properly sealed.
- Check for queen cells, especially in colonies used for queen rearing.
- Add sufficient super space (bottom super).
- Remove and extract early season honey crop.
- Freeze comb honey to prevent wax moth damage

August

- Check colonies for disease and monitor/treat for mites
- Remove and extract summer honey crop
- Remove section Supers
- Do not work bees unless necessary to avoid robbing
- Add more supers if needed.
- Decide if you will be re-queening



OSBA Fall Conference— *Bee There!* November 5, 2016

This year's OSBA Fall Conference at Tolles Career and Technical Center in Plain City OH will be another record-setting event. Guest speakers include:

Jamie Ellis

Steve Repasky

Reed Johnson

Alex Zomchek

Christie Welch

And others....

Check out our website for the growing list of vendors. Current list includes Bee-Pothecary, Better-bee, Dadant, Blue Sky Bee Supply and Mel Disselkoen. If you pre-order your beekeeping supplies, these vendors will bring them to the conference and you will save on shipping and handling.

Get your honey entries ready for our every popular Honey Judging Contest, judged by Jim Thompson.

For more information, visit www.OhioStateBeekeepers.org

Bee Aware (Continued from page 1)

queen excluder and makes it unnecessary to find the queen to guarantee she is below the excluder. In an hour or two all the nurse bees will have instinctively moved up to care for the open brood above the excluder. Now all that is necessary is to replace the excluder with a double screen that has an entrance facing the opposite direction from the hive entrance. It can be as simple as stapling screen over both sides of an inner cover hole of an inner cover that has a notched rim. The bees above the double screen are now queenless and will produce a queen which will mate and begin laying eggs in the separate unit above the double screen. Another super below the excluder further isolates the upper unit so no queen pheromone reaches the unit above to guarantee their queenlessness.

When the new queen has her own brood emerging the double screen can be removed to allow the upper unit to unite with the lower unit. As the upper unit bees pass through the lower unit the old queen will be dispatched and the new queen will have been installed. A sheet of newspaper between the two units is the safest method to unite them at this late date in the season.

The second step for winter prep is to reduce the varroa mite infestation level to guarantee healthy bees are producing the healthy bees to over winter. That will be discussed next month.

Field Crops and Bees: Research Shows Surprising Relationships, Need for Better Crop Management—from Catch the Buzz

WOOSTER, Ohio — Honeybees are negatively impacted by the insecticide-coated seeds of some field crops, yet they also seem to benefit from the presence of other field crops in the vicinity of their hives, according to research conducted by entomologists with the College of Food, Agricultural, and Environmental Sciences at The Ohio State University.

“Most corn seeds planted today are coated with insecticides. During the planting process, some of that coating is chipped off and the dust is released into the air and also lands on nearby flowers and trees,” said Reed Johnson, an assistant professor in the Department of Entomology.

Johnson and colleagues have studied the potential impact that such release of insecticidal dust during corn planting may have on honey bees. They found that bees do become exposed to the chemicals in several ways.

“Bees can pick up the insecticide from flowers and trees as they forage,” he said. “Also, the dust can stick to them as they travel across fields during the planting season. Finally, because corn planting gets underway at roughly the same time across the Midwest, there is a lot of this dust in the air in the spring and bees could become exposed to it that way, too.” Once bees pick up the insecticide, they carry it back to their hives, where young members of the colony become exposed to it, Johnson said. This exposure can cause important losses to colonies early in the spring.

“Colonies do recover from these early losses later in the year. But such losses can negatively impact beekeepers and fruit and vegetable farmers, as they will have fewer bees for crucial pollination services during the summer,” Johnson said.

Johnson said there are several management decisions farmers can make to reduce the impact of insecticide-coated corn seeds on bees:

- Kill weeds before planting so flowers don’t become exposed and foraging bees are not attracted to fields.
- Use planters that don’t vent upwards but toward the ground. Johnson said farm equipment manufacturers have started to make these changes in recent years.

- Seek out seeds without insecticidal coating for farms or fields that don’t require such an added insect-control measure. “Coated seeds are not needed in all situations and some fields will not benefit from them,” Johnson said. “They represent an added cost to corn farmers and definitely a high cost to beekeepers and farmers that rely on bees for pollination.”

While insecticide-coated corn seeds can have a negative impact on bees, the relationship between soybeans and these insects is quite different, Johnson said.

In another study, Johnson and postdoctoral researcher Chia-Hua Lin looked at the pollen content of honey collected by beekeepers from throughout Ohio over the summer of 2014. They found soybean pollen in 47 percent of the honey.

“We know that bees in Ohio are visiting soybeans, and that soybeans may be contributing to honey production,” Johnson said. “Also, there’s some evidence that pollination by bees can help increase soybean yield.”

Johnson said there are other questions that remain to be answered on this topic, including which soybean varieties are more attractive to bees and why.

“There is a good potential for people to work together on this line of research,” Johnson said. “It’s a valuable opportunity to have these two sides of agriculture — field crops and beekeeping — come together and explore mutual benefits.”

To learn more about current pollinator-related research, go to u.osu.edu/beelab.

Staying Ahead in the Hive

JULY



19 Tues

GCBA Meeting— Annual Picnic! Sign We are taking donations of items from club members for our fantastic Auction Table.

Bee Vampire Picks the Right Host to Suck:

MSU Today: Mark Kuykendall

New insights into the reproductive secrets of one of the world's tiniest and most destructive parasites – the Varroa mite – has scientists edging closer to regulating them.

“If you know your enemies better, you can come up with new ways of controlling them,” said Michigan State University entomologist Zachary Huang, whose research explores the fertility of the notorious mite, a pest that is devastating honeybee populations worldwide. The mite sucks the blood of honey bees and transmits deadly viruses.

The Varroa mite's lifecycle consists of two phases: one where they feed on adult bees, called the phoretic phase, and a reproductive phase that takes place within a sealed honeycomb cell, where the mites lay eggs on a developing bee larva.

The MSU-led study, published in the current issue of *Scientific Reports*, shows that the mites clearly prefer to infest adult bees at mid-age, or during the nurse phase of a bee's lifecycle when they take care of larvae, rather than during the younger (newly-emerged) or older (forager) phases of an adult bee. The study also found that the physiological type of a host bee had significant effects on the mite's reproductive fitness and success later on.

“Our study clearly demonstrated that Varroa mites preferred nurses over the older and younger bees,” said Huang, the study's lead author. “Further, we showed that feeding on different hosts gave them different reproductive outputs.”

Mites chose bees in the nurse phase of their lifecycle – the nutritional prime of bee life – over their older and younger counterparts at significantly higher rates.

Also, those who fed on nurses had the highest reproductive success rates and the lowest infertility rates.

Previous studies have shown that the mites can easily choose their reproductive hosts, but Huang's study shows that they can go one step further: the mites can correctly pick the most nutritious bees to suck blood from.

“This might seem very smart for the mites because they do not realize the reproductive advantage right away, but under natural selection this is rather easy to achieve.” Huang said. “The mites who made the correct choice will have more babies and their genes will become more dominant over time.”

The recent results have helped researchers zero in on mite reproductive and nutritional preferences and are a significant step in understanding the mysterious, parasitic relationship between the Varroa mite and the honey bee.

“This is an important step in understanding mite reproductive biology,” Huang said. “We can utilize this information as a step toward finding ways to regulate them.”

In future research, Huang will look to identify what precise factors the mites are relying on for their reproductive success.

“If they require a certain factor to have babies we can regulate that factor without affecting the bees – only the mites – and reduce their reproduction,” Huang said. “Instead of killing them with a chemical, this could eventually lead to a more natural way of mite control and a better outlook for honeybees.”

GCBA Honey Harvest Review in Photos:

