# DO NEWSLETTER

# Presidential Musings on Summer



Now that we are deep into summer the dearth has hit my area and most likely yours. This means that natural forage is at a low point and hives can starve if they don't have enough honey stores. They are also much more likely to rob surrounding hives. Here's a link to information on robbing http://entomology.ucdavis.edu/files/147611 .pdf. Keep a close eye your hive weights. If

Continued on p. 10

MCBA Motto: "Beekeepers Helping Beekeepers"

#### DUES!!

Did you send in your \$15 dues payment in January? Don't miss notices of upcoming meetings because your dues lapsed. Send your check today !

#### NAMETAGS ARE HERE!

In an effort to help everyone get to know each other (and especially for us older beekeepers who forget names), we will be furnishing nametags at meetings. Please pickup and wear your nametag at meetings and other MCBA events.

#### Contents

Presidential Musings on Summer by Dan Boylan	1 & 10
Honey Flow Hives by Chris Mancinelli	2 & 7
In Africa, Birds and Humans Form a Unique Hunting Party by Natalie Angier (reprinted from the NY Times	3 -4 & 8
MCBA Picnic 2016 by Rachel Newby	5-6
EAS 2016 Report by Vince Aloyo	9-10
In Every Issue: MCBA Marketplace, MCB Leadership Team, MCBA Membership for	

# MCBA summer Calendar of Events

Aug 6 - PSBA Annual Picnic, Fisher Bee Farm, McVeytown, PA

Aug 11-13 Montgomery County 4-H Fair, 4-H Center (4:30-9:30pm Fri, 9:30-9:30pm Sat and 9:30-4:00pm Sun) -- Volunteers to Man MCBA Booth Always Needed

Aug 25 - General Meeting 7pm, 4-H Center, Maple Room, Speaker: Katie Lee, Midwest Honeybee Tech-Transfer Team **Topic:** Varroa Management (presentation via Skype)

#### Sep 6 - Beginner Beekeepers Course 6pm, 4-H Center Sep 13- Executive Board Meeting 7pm, 4-H Center Sep 18 - 4-H Beekeeping Club, 4-H Center, Maple Room, 6pm -- Cooking with Honey and Trivia Contest

Sep 22 - General Meeting 7pm, 4-H Center, Maple Room, Speaker: Maryann Frazier **Topic:** Addressing the public in regard to pesticides: What beekeepers should know

## Honey Flow Hives by Chris Mancinelli

It was December 2015 and with great anticipation I received the box in the mail. FLOWHIVE was written across the side of it. Nearly twelve months earlier I had placed my order for it, when the crowd funding campaign kicked off to support it. I was instantly interested in the innovative way the FlowHive inventors figured out how to get honey out of the hive without using the traditional extracting methods. After researching the invention and the inventors, it assured me to know that they were actual beekeepers and came from a family of beekeepers. They had lived through the traditional ways, prior to coming up with this new idea. I had been keeping bees for only two years and had not yet extracted honey, although I had learned about the techniques to do so. My intention was to extract honey for the first time this year (2016), so I thought it could be a great opportunity to try the FlowHive and extract using both methods side-by-side...which is exactly what I got the chance to do.

I ordered six Flow Frames only, instead of the whole FlowHive setup. This was mainly to save some cost, since they are a bit pricey compared to traditional frames and foundation. But it also meant I had some extra work to do, since having the frames only meant that I would have to get a normal Langstroth deep hive body and modify it to accommodate the Flow tubes and mechanism. I bought an unassembled deep from one of the beekeeping supply outfits, assembled it and made the cut outs according to the instructions that came with the Flow Frames. I referenced the website extensively and watched a video they had posted on the FlowHive page to get additional guidance. In the end, I felt that some additional modifications were needed in



order to get a good fit and allow enough bee space. I added an additional <sup>1</sup>/<sub>4</sub> " shim above and below the deep super to give enough bee space above and below the frames. I also added blank follower boards on either side of the Flow Frame to get the 6 Flow Frames centered in the deep hive body and not have too much space on either side. I made the follower boards out of rigid insulation board graciously donated by a fellow beek (Thanks Charlie!). Using insulation board also helped to keep the weight down some. The instructions state clearly that the Flow Frames need to orient in a particular way so that they are tight together and tight against the back wall of the hive body. I learned this is so that the panel cutouts can be removed to observe the bees and check progress on their honey collection prior to

# In Africa, Birds and Humans Form a Unique Hunting Party

by Natalie Angier Reprinted from The New York Times Science Section July 22, 2016

Their word is their bond, and they do what they say — even if the "word" on one side is a loud trill and grunt, and, on the other, the excited twitterings of a bird.

Researchers have long known that among certain traditional cultures of Africa, people forage for wild honey with the help of honeyguides woodpecker-like birds that show tribesmen where the best beehives are hidden, high up in trees. In return for revealing the location of natural honey pots, the birds are rewarded with the leftover beeswax, which they eagerly devour.

Now scientists have determined that humans and their honeyguides communicate with each other through an extraordinary exchange of sounds and gestures, which are used only for honey hunting and serve to convey enthusiasm, trustworthiness and a commitment to the dangerous business of separating <u>bees</u> from their hives.

The findings cast fresh light on one of only a few known examples of cooperation between humans and freeliving wild animals, a partnership that may well predate the love affair between people and their domesticated dogs by hundreds of thousands of years.

Claire N. Spottiswoode, a behavioral ecologist at Cambridge University, and her colleagues reported in the journal Science that honeyguides advertise their scout readiness to the Yao people of northern Mozambique by flying up close while emitting a loud chattering cry. For their part, the Yao seek to recruit and retain honeyguides with a distinctive vocalization, a firmly trilled "brrr" followed by a grunted "hmm." In a series of careful experiments, the researchers then showed that honeyguides take the meaning of the familiar aboy seriously.

The birds were twice as likely to offer sustained help to Yao foragers who walked along while playing recordings of the proper brrr-hmm signal than they were to participants with recordings of normal Yao words or the sounds of other animals.

"The fact that the honeyguides were responding more to the specialized sound implies they recognize the

# In Africa, Birds and Humans Form a Unique Hunting Party (Continued from P. 3)

specific information content in the signal," Dr. Spottiswoode said. "It's not simply a cue to human presence. It's a signal that the person will be a good collaborator."

John N. Thompson, a distinguished professor of ecology and evolutionary biology at the University of California, Santa Cruz, said: "I think it's an absolutely terrific paper. This is one of those 'just-so' natural history stories we've known for years, and now we've got some hard-won data to show it really *is* so."

The report describes in detail the trans-species collusion to enjoy the fruits of bee labor. Bees transform gathered nectar and pollen into honey for food and wax for honeycomb housing. As honey is among the most energy-rich foods in nature, it is not surprising that bees guard it with their lives.

African bees are particularly aggressive and will swarm any intruder that so much as jiggles an adjoining branch. Even our closest relatives are loath to disturb a beehive. "Chimpanzees want to eat honey at least as much as humans do," Brian M. Wood, a biological anthropologist at Yale University, said. "But they don't possess the technologies that have allowed us to tap into that resource."

The Yao know what to do to subdue bee defenses. They wedge a bundle of dry wood wrapped in palm fronds onto a long pole, set the bundle on fire, hoist it up and rest it against a beehive in a tree. When most of the bees have been smoked out, the Yao chop down the tree, tolerate the stings of any bees that remain and scoop out the liquid gold within. Much harder for the Yao is finding the hives. That's where the honeyguides come in. Not only can they easily flit from tree to towering tree; they have unusually large olfactory bulbs, and they are good at smelling wax, which makes up a good part of their diet.

"It's decidedly odd to eat wax, but if you've got the metabolism to break it down, it's a good source of calories," Dr. Spottiswoode said.

# My Take on the MCBA 2016 Picnic

by Rachel Newby



I am going to tell you about this year's annual beekeeper's picnic from my point of view.

This was our (my husband's and my) fourth year attending MCBA's summer picnic. Our first year was when EAS was local, so the bar was raised quite high that year. There was a slideshow, games in which everyone participated, and we got to know a lot of our fellow beekeepers for the first time. Since that year, I have never missed a picnic. Not because I needed a burger, or because beekeeping is my life (we only have three hives, and just this week needed help from someone much more knowledgeable to help solve a swarm situation.)

The reason I never have missed an MCBA summer picnic since I've been a member is because I believe this community is an important, meaningful one, and I know I have so much to learn about the conscientious stewardship of my bees. These people-the folks that attend the annual picnic-are the folks who are going to bring about real change for beekeepers in our community.

You thought this was going to be a fun recounting of the day's activities, didn't you?

Of course, we all had a truly fun, enjoyable day. The grill was ably mastered by Tim and a few others, and I stuffed myself full (there were even veggie burgers!). The potluck was, in my opinion, the best yet (there were gorgeous bee-themed cupcakes and candied bacon that-I will confess to you-I ate SO MANY PIECES). Elinor and Tom, once again, brought their lawn games, from which I went home hoarse from the cheering (and a little bit of good-natured heckling.) Dan and the board kept the real business part engaging (and brief.)

...But that's not why I am writing this article.

#### Continued on p. 6

# MCBA 2016 Picnic

### (Continued from P. 5)

The point I must come back to is: get involved with your beekeeping community! Our board has worked tirelessly (I had NO IDEA how much of themselves they put into this endeavor until I was a member) to bring you interesting, informative content all year long. They will connect you with other bee keepers, they will spend their lunch break walking you through your own hive situation. They will plan completely enjoyable bi-annual events for you to connect with other beekeepers, and gorge yourself full of homecooked food in the process. I went to the picnic because I want to be involved, but I left feeling genuinely happy at how much of a good time I had (and not just because I won the smoker contest.) These are smart, fun people that have a lot to share, but you have

to get involved. You have to attend!

If you weren't able to attend the summer MCBA picnic, you missed out on what this stoic, overcommitted 30-something called a fantastic time. But it's not too late to get involved! The board meets every second Tuesday of the month, and we need YOU to join a committee and get involved with this meaningful work. The programs that MCBA has rolled out since I've been a member have real impact on our environment and community-*real impact*-and we need your help to make a difference!

Plus there's cupcakes, and a big trophy if you win the smoker contest. BUT, you have to win it away from me first.



# Honey Flow Hives (Continued from P. 2)

draining the honey out or 'tapping' the hive.

With all the hive body modifications complete and the Flow Frames installed, I picked one of my busiest hives (brood in 3 mediums) and put my modified 'Flow Box' on it sometime in early April. The Flow Frames are plastic and the bees need some time to accept them and start building wax onto them before they will start packing honey away. I had a queen excluder in at first but removed it since the bees didn't seem to be building out comb. But wouldn't you know it that not long after I found some brood growing in some of the cells! Well...back went the excluder and in time that brood hatched out, the bees took to the Flow Frames and built up the comb, and honey started packing into cells as the nectar flow kicked into full gear.

Flash forward to early July...time for extracting!!! With four colonies and only one with the Flow Frames I had a good chance to try both extracting methods side by side. What I can say straight away is that the Flow Frames is WAY easier. It actually works as advertised...which I was pleasantly shocked to discover. I had some initial trouble with about 27 lbs in about 15 minutes...and there was truly no need to open the hive at all, let alone chasing away bees, removing frames, uncapping honeycomb, and spinning out the frames and filtering. What's more is that the honey came out virtually clean and while I passed it all through a sieve screen anyway, there was almost no need.

While working on the Flow Frame extraction there were a number of minor tweaks we noticed that could be made to make it work a bit better...such as securing the frames from shifting when the key is used to start the flow and closing up some gaps so that bees can not escape the hive when the cover is removed, but all in all, I would call it a successful trial. And of course, using the Flow Frames or even a complete FlowHive setup does not eliminate the need for proper management of the beehive, including hive and brood inspections, swarm prevention, mite management, inspection of the Flow Frames themselves to ensure all the honey is capped and ready to extract, and all the typical activities we do to ensure a healthy hive. The FlowHive literature says that the

orienting the key which separates the honeycomb and allows the honey to flow out from the tubes, but after getting that sorted out (Thanks Tom!), the honey started to pour out and flow easily and quickly from the frames. From the 6 Flow Frames I extracted



frames can handle freezing temperatures, but I think I'll secure it indoors for the winter this year and try again next spring. Until then...time to enjoy the sweet fruits of our bees labor! ©

## In Africa, Birds and Humans Form a Unique Hunting Party (Continued from P. 4)

The birds can nibble on waxy plants, waxy insects, the waxy detritus in an abandoned bee nest. Or they can summon human honey hunters to crack open a felled and toasted hive, remove the honey and leave the fresh waxy infrastructure to them.

The birds can recruit helpers with a chatter, or be recruited with a trillgrunt. They can show their human companions the right trees with more chatters or a flick of their white-tipped tails. When assisted by honeyguides, Yao hunters found beehives 54 percent of the time, compared with just 17 percent when unaided.

Researchers have identified a couple of other examples of human-wild animal cooperation: fishermen in Brazil who work with bottlenose dolphins to maximize the number of mullets swept into nets or snatched up by dolphin mouths, and orcas that helped whalers finish off harpooned baleen giants by pulling down the cables and drowning the whales, all for the reward from the humans of a massive whale tongue.

But for the clarity of reciprocity, nothing can match the relationship between honeyguide and honey hunter. "Honeyguides provide the information and get the wax," Dr. Spottiswoode said. "Humans provide the skills and get the honey."

How the alliance began remains mysterious, but it is thought to be quite ancient.

"It appears to depend on humans using fire and hand-axes," Richard Wrangham, a biological anthropologist at Harvard University, said. Those talents date back to the lower Paleolithic, "so the relationship could be more than a million years old."

The bird might even have played a role in the emergence of fully modern humans and their energetically demanding brains. Honey is a vital resource for many subsistence cultures, Dr. Wrangham said, "sometimes supplying 80 percent of calories in a month."

It is beloved by all who depend on it. Among the Hadza of Tanzania, Dr. Wood said, "it's the top choice of what people claim they would like to eat — the sweet, delicious meal they'll go for when given the chance."

## Presidential Musings (Continued from P. 1)

you can lift a double deep (or 3 mediums) off of its stand with one hand it's too light. Inspect to ensure there are some frames of honey. Feed sugar water as required. This is also the time to check mite levels. As the queens reduce laying due to the dearth the hive population will begin to reduce causing the mite infestation percentage to increase. Dr. Dennis vanEnglesdorp recommended at EAS this week that mite levels be tested in Aug, Sept, & Oct and after any treatment to ensure that it worked as expected. This is based on data obtained by the Bee Informed Partnership. Action should be taken at the 2 % level (2 mites per 100 bees tested) and mite levels should be maintained less than 5 % at all times with a goal to remain at 3 % or less. Sugar roll, or alcohol wash, are the methods to use for determining mite levels. Other methods are not reliable. You can help inform other beekeepers by recording your results at MiteCheck.com. This is another program run by the Bee Informed Partnership to help inform us all. It just costs just a little of your time.

The Eastern Apiculture Society 2016 Conference at Stockton University in NJ was a great success and was fun and informative for all. I highly recommend that our membership attend EAS whenever possible. Our own Dr. Vincent Aloyo presented a wonderful program on queen raising using a Cloake board. Past club president Jim Bobb was recognized by the EAS for his continuing efforts to ensure the conferences are a success even though he is no longer the chairman.

Check out the "Bee Health" app that was developed by Dr. Medhat Nasr of Alberta Canada. It's a free app for IPhone or Android phones. I think you will find that it can be useful. The 2017 EAS Conference is being held in Delaware. I hope to see even more of you there next August.



# Eastern Apicultural Society 2016 Report

by Vince Aloyo



This year's annual short course and conference were held at Stockton University in Galloway, NJ, July 25 through July 29. One major theme that extended across all 5 days was queens and nucleus colonies (nucs). A total of 19 presentations by a variety of speakers emphasized the importance of locally raised queens and the value of nucs in order to arrive at a sustainable apiary. The goal of most of these talks was to inform beekeepers how to eliminate reliance on Spring packages.

In the short course, I presented a lecture series on queen rearing using the Cloake Board method. Additionally, Jennifer Keller and I demonstrated grafting techniques. Monday Erin MacGregor-Forbes and Thursday Doug Vinson discussed non-grafting techniques for obtaining queens. Tuesday, Doug Vinson explained how summer splits help with Varroa mite control, and I discussed how to overwinter nucs.

Thursday, Dr. Heather Mattila was awarded the James I Hambleton award and presented a very informative discussion on how wellmated queens enhance the ability of a colony to thrive. She presented evidence that colonies with a queen who has mated with multiple drones are superior to colonies whose queen mated with a single drone. Jon Zawislak reviewed honey bee

# EAS 2016 Report (Continued from P. 11)

genetics by describing the genetic variation that occurs during egg production by the queen. Dr. Jeff Pettis reviewed reasons for queen failure. An important reason is that sperm in the queen's spermatheca can be killed when the queen is subject to extremes of temperature during shipping. Dr. David Tarpy reviewed optimal conditions within the colony for queen rearing. He stressed that the cell building colony requires 200 or more young nurse bees per queen cell to ensure prime queen development. Additionally, he emphasized that a mating nuc requires about 1000 workers to adequately support the queen.

Friday, Dr. Tarpy was awarded the Roger A. Morse teaching award. In his acceptance speech, he further discussed how multiply mated queens improve the colony. He also advised that his lab (for a fee) will test queens on a variety of parameters. In the afternoon, Dr. Tarpy detailed research on qualities of a 'good' queen, including having greater than 300 ovarioles, having a high number of sperm in her spermatheca from 15 or more drones, and having a low virus levels. He concluded that "good queens make good colonies." Also in the afternoon Billy Davis explained how he over winters nucs in northern Virginia: he uses two 5 frame medium nuc boxes to successfully over his locally raised bees and queens.

In addition there were 15 presentations concerning Varroa mite and their control. Unfortunately, due to my own teaching, I was unable to attend most of these talks. However, Samuel Ramsey from the Bee Informed Partnership showed in vitro data suggesting that Varroa mites reproduce on honey bee fat pads and not on hemolymph (bee blood) as is usually suggested. If confirmed, this finding may suggest a new treatment strategy.

Overall there were 115 different presentations and workshops (plus 6 apitherapy talks) during the five days; it was impossible to attend all of them. This report summarizes a few of the talks that I was able to attend. Next year's EAS meeting will be at the University of Delaware in Newark, Delaware July 31 to August 4<sup>th</sup>. I strongly urge you to attend next year to get new information, visit vendors and most importantly, talk bees with many beekeepers.

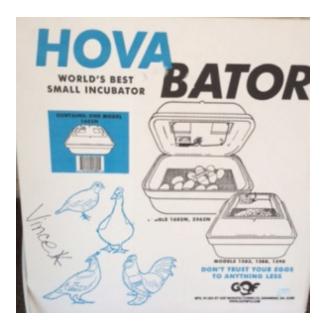
# MCBA Marketplace

Would you like to advertise in marketplace? If you have beekeeping-related products to sell or services to offer, please send your advertisement to the newsletter editor at: annbreinig@me.com

#### **Observation Hive for Sale**

Looking for an observation hive to take with you when speaking to school groups or at environmental events? Want to attract attention to your booth at a farmer's market? Bring an observation hive! I have a previously used observation hive for sale. It holds three, medium depth frames, giving space for brood and honey stores. A port that accommodates a mason jar for feeding sugar syrup is at one end of the hive, whereas the other end has a metal plate that can be raised to provide a bee exit directly or connection of a tube for exit via a building window. Frames are placed in the hive by opening the Plexiglascontaining side door with wooden knob. The hive also has a metal handle at the top for carrying to an event and screened ventilation holes on the sides and top. I've successfully used an identical observation hive for long-term placement in a school-even over winter-making the daily activities of the bees accessible to children.

Contact Vincent Aloyo: <u>vincent.aloyo@gmail.com</u> 610-278-1621. \$125.



#### Extractor for Sale

Large old 24 frame (up to deeps) extractor for \$125. The extractor has a galvanized tub, which has been coated with "Cam-Coat" food grade coating. It is a wonderful old piece of machinery worthy of Charlie Chaplain's "Modern Times". It has got a wonderful cast steel handle as a gear shifter for various speeds. Needs a motor, but any old small motor with a pulley will do. Once belonged to former Chester County beekeeper Warren Graham, who died about 1990 --- so this thing has been around for a long time and extracted tons of honey. Call Bruce Gill at Harriton House <u>610 525 0201</u> or e-mail at harritonhouse@aol.com

#### The Harriton Association

500 Harriton Road P.O. Box 1364 Bryn Mawr, PA 19010

#### www.HarritonHouse.org

# For Sale: Brand New Incubator for Use in Queen Rearing

Raising our own queens from colonies successfully surviving winter is recommended to improve our locally adapted stock. After being sealed in the finisher hive, queen cells can be moved to a temperature and humidity controlled incubator to complete their development. Finished queen cells can then be moved to a queenless hive or mating nuc a day or so before emergence. The "Hova Bator" has an adjustable thermostat with digital temperature readout. Also included is the "IncuTherm Plus™ Monitor" which provides remote temperature and humidity monitoring and has a min/max memory. Water is added as needed based on the digital hygrometer readout. The "Circulated Air Fan" assures uniform temperature throughout the incubator space.

13 Contact Vincent Aloyo: vincent.aloyo@gmail.com 610-278-1621. \$100

# MCBA LEADERSHIP TEAM 2015-2017

#### MCBA Leadership Team 2015-2017

President Vice President Secretary Treasurer Dan Boylan Tim Cherry Kimberly Baccari Cindy Yaskowski dpboylan@comcast.net zendiver4@gmail.com kimberly@baccariprowriters.com cindy@yaskowski.com

Newsletter Editor Queen Rearing Project Hive Steward Website Liason Queen Rearing Project 2014 PA Beekeeper of Year Communications Others on the Board:

MCBA E Ann Breinig Scott Famous Walt Fitzgerald Elinor Spring Dr. Vince Aloyo Harold Jenkins Rachel Newby Chris Mancinelli Charlie Breinig

MCBA Board of Directors 2015-2017tigannbreinig@me.comousfamous55@verizon.netgeraldfitzgerald106@comcast.nettingT5Springer@aol.comAloyovincent.aloya@gmail.comnkinsno e-mailewbybuchanan.1978@gmail.comncinellimancinc@gmail.comreinigCharlieNoSpam-Bee@yahoo.com

## Send in your Dues today for Montgomery County Beekeepers Association

Name	
Address	
City/State/Zip	
Email Address	-
Phone Number	
Dues are applied on a calendar year basis. January 1 <sup>st</sup> to December 31 <sup>st</sup>	
New membership Renewing membership	
MCBA DUES \$15.00 per household* per year \$	
PSBA DUES** \$20.00 for one person per year or \$25.00 per household per year \$	_
TOTAL ENCLOSED \$	

\*\* We recommend: that you also pay dues for PA State Beekeepers in order to encourage research on bee health, and promote efforts to dissuade local township and boroughs from restricting beekeeping. You will also benefit from the 10 annual state newsletters and information sharing. (\*household = 2 adults and all children living at one address.)



Montgomery County Beekeepers Association PO Box 203 Hatfield, PA 19440

[Recipient]

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