76th ANNUAL SEMBA BEEKEEPERS’ CONFERENCE

Saturday, March 15, 2014
8:00 a.m. to 5:00 p.m.

SCHOOLCRAFT COLLEGE
VisTaTech Center 18600 Haggerty Road
(between 6 & 7 Mile Roads)
LIVONIA, MICHIGAN

Park in the North Campus parking lot that is close to the VisTaTech Center entrance.

Please enter through the VisTaTech Center entrance. All other doors will be locked.

VENDORS INTERESTED IN A TABLE AT THE 2014 SEMBA CONFERENCE, PLEASE CONTACT KEITH LAZAR, (248) 361-1710, keithmlazar@hotmail.com

The 76th Annual SEMBA Beekeepers’ Conference is a one-day event designed for beekeepers as well as those who are considering keeping honey bees for the first time. There is a $15 per person registration fee at-the-door for each SEMBA member, and a $20 per person registration fee at-the-door for each non-member. No pre-registration is necessary. SEMBA members will be able to renew their memberships. No new memberships will be taken at registration.

Keynote speaker will be Dr. Clarence Collison, retired professor and head of the Department of Entomology and Plant Pathology at Mississippi State University.

CONFERENCE PROGRAM
7:30-9:20am Registration, VisTaTech Center
7:30-8:10am Video: “Why are Bees Dying Off”
8:10-8:20am Welcome by Clay Ottoni

8:20-11:30am Three Keynote Addresses
by Dr. Clarence Collison
~Examining Comb – What do they tell you?
~Honey Bee Management for Maximum Honey Production
~Honey Basics from Flower to Jar.

11:30 Review of Concurrent Sessions and Explanation of Grand Prize - Clay Ottoni
11:30 Lunch, visit vendor displays

There will be no potluck. You may bring a sack lunch or visit an area restaurant.

11:30-12:15 & 12:30-1:15 Northern Bee Network Local Bee Nuc Initiative
- Dr. Megan Milbrath

1:30-2:30pm First Concurrent Session
1) The First Year – Keith Lazar and Gilbert Terry
2) Common Bee Enemies and Defenses
- Don Schram
3) Microscopic Bee Physiology
- Dr. Zachary Huang
4) The Evolution of Cut Comb Honey
- Winn Harless
5) Beekeeping in the Ukraine and Apimondia 2013
- Ann Marie Fauvel

2:40-3:40pm Second Concurrent Session
1) What Beekeepers Wished They’d Known at the Bee-ginning
- Charlotte Hubbard
2) Filling the Urban Habitat
- Rich Wieske
3) Queen Rearing
- Earl Hoffman
4) Making and Selling Candles
- Judy Schmaltz
5) Beekeeping in China
- Dr. Megan Milbrath

3:50-4:50pm Third Concurrent Session
1) Bee-ginner Panel Discussion
- Mike Siarkowski, chair
2) Bee-ing a Product Vendor and Ambassador
- Joan Mandel
3) Advanced Panel Discussion
- Winn Harless, chair
4) Making Mead
- Ken Schramm
5) Top Bar Hives
- Keith Steller

4:50 Closing and Grand Prize Drawing - Clay Ottoni

SPECIAL FEATURES OF CONFERENCE:

DOOR PRIZES
All bee-conference attendees will receive a door-prize ticket when they register.

GRAND PRIZE RAFFLE
In a Grand Prize Raffle, three separate prizes will be awarded: 1) a complete hive, donated by
Dadant & Sons of Albion, Michigan; 2) a 3 lb. package of bees donated by Shawn Shubel of Nectar Sweet Apiaries; and 3) a hive donated by Carlo Daleo of Hardy Honey Bee Farms.

Raffle tickets at $1.00 each. Tickets may be purchased at the beekeeping conference. You must be present to win.

LIST OF VENDORS ATTENDING THE CONFERENCE
To save shipping charges and to be assured that a vendor has what you want, it is advisable to place your order with the vendor before attending the conference.

~Dadant and Sons, Inc. (877)-932-3268
~Turtle Bee Farm, (810)-266-4880
~Anthony Bee Farm, (810)-621-4371
~Buggsnet, LLC. (equipment) (248)-361-1710
~Cutler Supply, (equipment) (810) 633-9450
~Golden Harvest, (woodenware) (810)-338-1523
~Northern Bee, (woodenware) (989)-370-4841
~Lavender Sweet Lavender, (bee products)
~Napoleon Bee Supply, (517)-499-0439
~BRW Nucs
~Huron Bees
~Michigan Honey Festival
~U Of M Bees

NORTHERN BEE NETWORK
The Northern Bee Network is a Michigan founded Beekeeping organization designed to support beekeepers in the Northern States by promoting collaboration between beekeepers and providing resources for more sustainable beekeeping. Our objectives are to 1) Improve access to locally raised bees 2) Increase communication and mentoring opportunities among local beekeepers, and 3) Provide a forum for information and resources for beekeeping in northern climates. The website for the Northern Bee Network (www.northernbeenetwork.org) is now live, and has lists of mentors, local queen rearers, and local nucs for sale.

Here is how you can participate and support MI beekeeping:
1. Sign up to be a mentor in your area (http://www.northernbeenetwork.com/wordpress/mentoring/sign-mentor/) Mentoring is the best way to pass on beekeeping knowledge. There is no set commitment when you sign up – you can be as available as you like, travel as far as you want, and put in as much time as you can.
2. Sign up to sell a nuc in your area (Even just one!) (http://www.northernbeenetwork.com/wordpress/local-bees-2/get-listed/)

There are not nearly enough local nucs available to meet the demand (especially as package bee prices rise). If you have even one healthy overwintered hive, you can make a nuc available to your neighbor beekeepers (and we’ll help you!). You can list as many nucs or queens as you like with NBN, and you make all the conditions and keep all the money from the sale. We just provide a platform for people who are looking for bees to find some in their area.

3. Sign up for our newsletter
http://www.northernbeenetwork.com/wordpress/contact/
We’ll keep you posted on bulk purchase opportunities, clinics, and beekeeping events in MI Our goal is to support Michigan beekeepers and Michigan Bees. If you have ideas of how we can be useful, or if you would like us to visit and speak to your bee club about the program, please contact Meghan Milbrath (651) 428-0543, northernbeenetwork@gmail.com.
~Submitted by Megan Milbrath

HONEY BEES SELECTIVELY AVOID DIFFICULT CHOICES
Human decision-making strategies are strongly influenced by an awareness of certainty or uncertainty (a form of metacognition) to increase the chances of making a right choice. Humans seek more information and defer choosing when they realize they have insufficient information to make an accurate decision, but whether animals are aware of uncertainty is currently highly contentious. To explore this issue, we examined how honey bees (Apis mellifera) responded to a visual discrimination task that varied in difficulty between trials. Free-flying bees were rewarded for a correct choice, punished for an incorrect choice, or could avoid choosing by exiting the trial (opting out). Bees opted out more often on difficult trials, and opting out improved their proportion of successful trials. Bees could also transfer the concept of opting out to a novel task. Our data show that bees selectively avoid difficult tasks they lack the information to solve. This finding has been considered as evidence that nonhuman animals can assess the certainty of a predicted outcome, and bees’ performance was comparable to that of primates in a similar paradigm. We discuss whether these behavioral results prove bees react to uncertainty or whether associative mechanisms can explain such findings. To better frame metacognition as an issue for neurobiological investigation, we propose a neurobiological hypothesis of uncertainty monitoring based on the known circuitry of the honey bee brain.
~Catch the Buzz 01/08/2014
**2013-2014 WINTER-LOSS SURVEY**

1) How many of your hives were alive in September 2012? ______
2) How many hives are alive now? _______

Send your results to rsuther@sembabees.org

**SEMBA MEMBERSHIP RENEWALS**

The SEMBA treasurer is now accepting membership renewals for those members whose dues expire in April 2014. Enclosed is a renewal slip for members who receive their newsletter by postal mail. An email renewal form will be sent to members receiving their newsletter by email.

**SEMBA LEADERS**

President ........................................Clay Ottoni
1st Vice President..........................Winn Harless
2nd Vice President ...........................John Haynes
Secretary ......................................Sandy/Randy Graichen
Treasurer ......................................Mary Sutherland
Past President .................................Roger Sutherland
Web Master ....................................Tom Lisk
SEMBA conference ......................Kim and John Haynes
Beginning Bee Class Leader..............Mike Siarkowski
Advanced Bee Class Leader ..............Winn Harless
SEMBA Hostesses .........................Randy Graichen
Oakland Chapter .........................Dennis and Donna Holly
Historian ......................................Ron Forfinski
SEMBA Representative to MBA ........Rich Wieske
SEMBA Director ............................Fritz Sanders
SEMBA Director ............................Don Schram
Tollgate Representative ....................Clay Ottoni
Ad Hoc Past Presidents .................Keith Lazar, Bill Sirr
Newsletter editors ........................Mary/Roger Sutherland

**DRONES ARE MORE SUSCEPTIBLE TO WIDESPREAD INTESTINAL PARASITES**

A research team has found that male European honey bees, or drones, are more susceptible than female European honey bees, known as workers, to a fungal intestinal parasite called Nosema ceranae. Originally from Asia, Nosema ceranae has rapidly spread throughout the world, and may contribute to the high number of colony deaths now observed in many regions of the northern hemisphere. These findings demonstrate the delicate nature of male honey bees, which are important to honey bee colony reproduction, to a well-distributed parasite.

~Source: MISIN - Midwest Invasive Species Information Network, January 19, 2014

**POLARIZED LIGHT GUIDES HONEYBEE TO HONEY SOURCE**

Scientists have found that honeybees use the pattern of polarized light in the sky invisible to humans to direct one another to a honey source. The study demonstrated that bees navigate to and from honey sources by reading the pattern of polarized light in the sky. The discovery, published in the journal Philosophical Transactions of the Royal Society B, shines new light on the astonishing navigational and communication skills of an insect with a brain the size of a pinhead.

~Apinews, January 06, 2014

**SEMBA CONFERENCE**

March 7-8, 2014 MBA Spring Conference at
Michigan State University
July 12, 2014 Michigan Honey Festival at
Frankenmuth, MI
July 20, 2014 SEMBA Picnic - Tollgate Farm
In Novi, MI

**BEEKEEPING MEETINGS IN SOUTHEASTERN MICHIGAN**

**Oakland Bee Club**

For information contact Dennis Holly,
(248)-542-1316 or Hollysapiaries@yahoo.com

**Monroe Bee Club**

For information contact Bill Bray at
braybill@hotmail.com

**Ann Arbor Backyard Beekeepers**

For information contact Megan Milbrath,
(651)-428-0543, or a2b2club@gmail.com

**Biodynamic Beekeeping, Ann Arbor**

For information contact Eileen Dickinson at
(734)-717-4145.

**Pine River Bee Club, Goodells, MI**

For information contact (810)-364-5477.

**SINGLE GENE SEPARATES QUEEN FROM WORKERS**

A team of scientists from Michigan State University and Wayne State University unraveled the gene’s inner workings and published the results in the current issue of Biology Letters. The gene, which is responsible for leg and wing development, plays a crucial role in the evolution of bees’ ability to carry pollen. "This gene is critical in making the hind legs of workers distinct so they have the physical features necessary to carry pollen," said Zachary Huang, MSU entomologist. "Other studies have shed some light on this gene’s role in this realm, but our team examined in great detail how the modifications take place."

~ABJ News, January 30, 2014

**PROCEDURE FOR ORDERING BEEKEEPING MAGAZINES**

To order beekeeping magazines at bee club discounted prices, call the publishers directly and indicate to them the name of your local club. For Bee Culture call: 1-800-289-7668. For American Bee Journal call: 1-888-922-1293 or 1-217-847-3324.

Editors: Roger & Mary Sutherland rsuther@hotmail.com http://www.SEMBA.org
ANCIENT PHEROMONES KEEP QUEEN IN CHARGE

Researchers have identified a particular class of structurally similar, queen-specific hydrocarbons that suppress the reproduction of ant, wasp and bumblebee workers alike -- and they suggest that these pheromones have been around, signaling fertility in social insects, for nearly 150 million years. Previous studies have shown that when it comes to such social insects, queens maintain their monopoly on reproduction by emitting chemical signals that render their loyal workers infertile. But, even though these signals, called pheromones, achieve the same end in various species, they are structurally diverse. Annette Van Oystaeyen and colleagues studied the chemical profiles of the outer skeleton, or cuticle, of the desert ant, the common wasp and the buff-tailed bumblebee and found several compounds that were specifically overproduced in the queens of each species. They tested those chemicals on workers and discovered that, even when their queens were gone, the presence of saturated hydrocarbons kept the workers infertile. (Meanwhile, however, control groups of the insect species rapidly developed ovaries in the absence of their queens.)

~ ABJ Extra-News, January 16, 2014

CAFFEINE BOOSTS BEES’ MEMORIES

Plant defense compounds occur in floral nectar, but their ecological role is not well understood. We provide evidence that plant compounds pharmacologically alter pollinator behavior by enhancing their memory of reward. Honeybees rewarded with caffeine, which occurs naturally in nectar of Coffea and Citrus species, were three times as likely to remember a learned floral scent as were honeybees rewarded with sucrose alone. Caffeine potentiated responses of mushroom body neurons involved in olfactory learning and memory by acting as an adenosine receptor antagonist. Caffeine concentrations in nectar did not exceed the bees' bitter taste threshold, implying that pollinators impose selection for nectar that is pharmacologically active but not repellent. By using a drug to enhance memories of reward, plants secure pollinator fidelity and improve reproductive success.


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**SE MBA Bargain Corner**

**For Sale:**
~Bees from H+R Apiaries, GA. 3 lb. $94, 2 lb. $84. Delivery April 24, 2014. No cage charge.  
   Contact: Mike Siarkowski, (517)-545-0824, bcky286@yahoo.com

~Beekeepers’ Association           5488 Warren Road
Organized April 1, 1934 Ann Arbor, MI  48105-9425

~Beeswax for sale. Very clean (medium color). About 8-10lbs. available for $4.50/lb. 
   Contact: lizze.toddmasters@gmail.com

~Beekeeping association. 3# packages from Wilbanks Apiaries, Georgia. Pick-up date April 22, 2014. Call Blanche Barber, (248)-634-7017.

~Bees to be delivered in April. Bee classes starting February. Bob Jastrzebski, bob@cimsurf.com

~5 frame nucs (deeps) in plastic coated cardboard nuc boxes. There is NO deposit on the nuc boxes and no frame exchange. Delivery approximately May 11. Contact: Don Schram (248)-310-8205, don.schram@gmail.com

~5 frame nucs for sale for $140; 10 frame deep with at least 6 frames of brood for $180; and Italian queens $24 each. For further information, contact Carl at hardyhoney@att.net or (586) 484-1110, please leave a message.

**Hive Location Offered:**
~6 acre farm in Centerline, MI. Contact: Mark Prentiss 586-202-9466 (risingstar.chefprentiss@gmail.com)

Note: Ads in the Bargain Corner are free to SEMBA members. To place an ad, contact Roger Sutherland rsuther30@gmail.com.