MARYLAND STATE BEEKEEPER'S ASSOCIATION

THE BEELINE

Founded 1908

Volume XXIX, No. 111 October 2005

President's Message

by David G. Smith

Two years in review: As the mandatory end of my two-year tour as president of MSBA approaches, I thought it appropriate that I reflect on some of the significant issues that have been addressed during the recent past. Hopefully you have been aware of most of these.

First, I trust you have been as pleased as I have been in hearing the many excellent speakers that have appeared at our meetings over the past four years. To mention just a few: Dr. Tom Seeley from Cornell, Jennifer Berry from U. Georgia, Dr. Elizabeth Capaldi from Bucknell, Dr. Rick Fell from Virginia Tech, Charlie Harper and his Russian Queens, Dr. Mike Hood from Clemson, Dr. Marla Spivak from U. Minnesota, Dr. David Tarpy from NC State and Dr. Dewey Caron. Each has given us the opportunity to expand our knowledge of beekeeping far beyond what we might gain from reading a book. The ability of MSBA to provide such an excellent opportunity for education is worth much more than our annual dues.

On a related subject, you may remember that in the last newsletter I commented that although there were severe losses of colonies during the past winter, many members "had minimal losses 25% or less. It would be appreciated if those of you who fall in the category of minimal loss and would like to share your beekeeping skills would contact me as soon as possible. At our Fall meeting in October, it would be good if we had a panel discussion on the subject of *Colony Management for Successful Winter Survival*. The panel members could then share their management techniques with the attendees." Unfortunately, not a single beekeeper stepped forward. I consider it most unfortunate that there is such little interest in reducing our winter losses by sharing our management skills.

Second, hopefully you have noted the significant improvement in the quality of the MSBA web site: http://iaa.umd.edu/mdbee/main/home.html Jon Bealer has done an excellent job of upgrading and expanding the availability of information. As part of this effort the Second Vice Presidents were asked to contact him and provide information on their local extension service. Unfortunately they have yet to respond to this request. The contact individuals for each of the regional beekeeping organizations were also asked to coordinate with Jon Bealer to ensure their information remained current. Unfortunately, a lot of old information on March 2005 classes remains on these pages.

Third, some of the Master Beekeepers from MD and VA developed a pilot course on advanced beekeeping. The pilot was presented at the Beltsville lab in June with two dozen individuals in the class. The course was well-received and it is intended that a similar course be presented next summer. Hopefully a good attendance will further increase our knowledge of beekeeping.

Fourth, MSBA has continued to participate with the other regional states in the Mid-Atlantic Apiculture Re-

MSBA Fall Meeting & Honey Show

October 15, 2005

MD Dept of Agriculture, Annapolis MD

Program information Inside

search and Extension Consortium (MAAREC). Your officers attend their meetings and participate with the research efforts. A wealth of knowledge can be found on the MAAREC web page: http://maarec.cas.psu.edu/

Fifth, John Moyer continues to do an excellent job of producing each issue of BEELINE. It must be noted however that the content of each issue is dependent on the input from our membership. John serves as the editor but the MSBA membership is the staff that should be providing the input. The Second Vice Presidents were requested to submit an article for publication, but John reports that only Bill Miller and Lloyd Luna have responded.

Finally, I have enjoyed the challenges of being an officer of MSBA for the past four years. It has allowed me to learn more about beekeeping and to become better acquainted with a large number of individuals who attend our meetings. I will pass the responsibility to your next president with some regret, but with a greater appreciation for MSBA's contribution to beekeeping in Maryland.

beekeeper@closecall.com

NOTICE:

LUNCH FOR THE OCTOBER MEETING WILL BE PIZZA, SOLD BY THE SLICE. EACH PERSON PURCHASING A PIZZA LUNCH WILL ALSO RECEIVE A SODA AND A BAG OF CHIPS.

MSBA WILL ALSO PROVIDE COFFEE AND REFRESHMENTS FOR THE BREAKS.

PLEASE CHECK FOR ANY UPDATES TO THIS OFFERING UPON YOUR ARRIVAL AT THE MEETING .

MARYLAND STATE BEEKEEPERS MEETING
OCTOBER 15, 2005
Maryland Department of Agriculture

8:30 am Coffee and registration for Honey Show

9:30 am Opening Comments and Announcements - David Smith, President

9:45 am Treasurer's Report

10:00 am Presentation of Slate of Officers / Elections - Paul Dill, Chair, Nominating Committee & *drawing for door prize*

10:15 am Jerry Fisher's Report

10:30 am Mark F. Feldlaufer, Research Leader USDA/ARS Bee Research Laboratory "Beltsville Bee Lab Update - Honey Bee Viruses, Disease and mite control"

11:30 am - 12:30 pm LUNCH & *drawing for door prize*

12:45 pm Presentations of Nominees MSBA awards

MSBA Honey Label - Lloyd Luna

1:00 pm Dr. Ernesto Guzman-Nova, Associate Professor, Department of Environmental Biology, University of Guelph, Canada

"Genetic Studies on the Defensive Behavior of Honey Bees"

1:45 pm Questions & Answers

2:00 pm Break & *drawing for door prize*

2:15 pm Dr. Ernesto Guzman - "Research on Varroa Mite Control" - Q & A

3:00 pm Break & *drawing for door prize*

3:15 pm Honey Show Results

4:30 pm Adjournment

JUDGING HONEY

Dewey M. Caron & Ann Harman
Presented MSBA MTG June 2005

A **judge** in a honey show searches for the errors beekeepers can make when they prepare bee hive products for sale/exhibition. The beekeeper should strive to market/show the same high quality products the honey bee so diligently stores in her hive. And we must not lose sight of the ultimate goal - what do honey product consumers seek in these same bee hive products?
Foremost - Quality always sells!

Judging Equipment

Polariscope - refractometer – tooth picks – scale – score card – experience

Evaluation Considerations

Density – Why 18.6 %? Is lower better? What scale of point deduction is best?

Crystals – form around impurities – less tasty & could lead to fermentation

Flavor – judges need to recognize fermentation, waxiness & scorching
What to score bitter, off-flavor honey? What about forest Honey?

Cleanliness – is it next to Godliness in Honey?
Lint – fiber pieces from class cleaning/straining honey
Debris – brood remains, wax, propolis – all have their place BUT NOT in honey
Foam – air bubbles a fact of life – need to settle properly
Wax – taste test or detect suspensions

Container – what we look at first (and most critically) at point-of-sale
Judges check inside lid, honey surface w/ reflected light, beneath and outside the jar

DARK HONEY – tip slowly onto cap interior to examine upon opening OR dilute a spoonful with distilled water and strain through a white linen handkerchief.

HONEY IN THE COMB

Oh so easy – the 3 I's – look for inconsistency, imperfections, inappropriate exhibit choices.

THE HONEY EXCHANGE

When was the last time you tried honey from Virginia? The Eastern Shore? Garrett County? or even St. Mary's County? Unless you have some good friends scattered about the State chances are that you don't have lots of opportunities to explore, experiment and enjoy honeys other than your own. Well, at the Fall meeting, October 15th, you can broaden your horizons, improve your palate, tease your taste buds and explore some of the wide world of honey…and you are part of the plan.

Here's what we're going to do. You bring up to 3, one pound glass or plastic bottles of your famous, wonderful and perfect honey to the meeting. It has to have your label on it, and something (either directly on the label or a second label on top or the back) that tells what kind of honey it is, and, if possible, when you harvested it. If it has all of that, when you arrive at Registration, you turn in your 3 bottles, and we'll give you 3 Honey Exchange Tickets. Then, your honey goes on display so everyone can see what's available. They'll be able to look at all the fancy labels, at the varieties, at all the colors and kinds of honey that MSBA members produce. Please bring 3 bottles that are all the same variety, color and flavor.

Then at the end of the meeting, bring your Honey Exchange Tickets to the table and you can pick and choose from all the honey that others have brought. You give a ticket, and take a jar. It's as simple as that.

Now, you may not get that jar you wanted because somebody got there first. It happens. What can you do? For starters, bring some extra labels or business cards so if somebody didn't get your perfect honey, they can take a label or a card and get in touch with you later. Even if they did, they may want more. Or may be able to sell some of your honey at their place… they'll need to know how to get a hold of you. And, if there was something you thought was the best you ever tasted… you can get in touch with them.

So, bring 3 jars of you best and take home three jars of somebody else's best.

♦ ♦ ♦

Mark your calendars:

COMING EVENTS

The following events were announced at the MSBA Board meeting. Locations and details to be announced. Please note that the dates may be tentative and subject to confirmation of location approvals:

MSBA Fall Meeting & Honey Show
October 15, 2005 - Maryland Dept. of Agriculture

Upcoming
Local/ National / International Meetings:

INTERNATIONAL BEEKEEPING CONGRESS
November 13-18, 2005, Bangalore, India
(Organized by: Century Foundation, Bangalore)

2006 ABF Convention: Wednesday, Jan. 11, through Saturday, Jan. 14, 2006 at the Hyatt Regency Louisville Hotel in Louisville, KY

♦ ♦ ♦

How can we reach you?? …

MSBA Records

Please send address /email /phone # changes to:

Christine Goldsmith,
Treasurer MSBA
1766 Bloom Road
Winfield, MD 21157

Annual Honey and Honey Cookery Show Rules and Premium List

General Rules

1) Entries will be accepted at 50 Harry S. Truman Pkwy, Annapolis, Md., from 7:30 a.m. until 9:00 a.m. on the day of the show, Nov. 13, 2004. Entries must remain in place until released by the show chairman.

2) Entries will be accepted from anyone attending the MSBA meeting (MSBA members and non-members). Entries from exhibitors not present at the MSBA meeting (entries brought to the show by someone else) will only be accepted if the exhibitor is a MSBA member.

3) Only one entry will be allowed in each class from any household, partnership or beekeeping establishment.

4) The exhibitor will select the class for his/her entry. (Assistance will be provided in selecting the correct class when making entries). The chairman of the show reserves the right to make a final determination and change, if necessary, entry classes. Classification of sweet and dry mead may be changed by judges (correct classification may be determined by chemical tests after the bottles of mead are opened).

5) No exhibitor's name or label will be allowed on any entry except in designated classes.

6) The decisions of judges are final. Judges may withhold prizes for insufficient merit or award a lower prize at their discretion. Entries that do not comply with the rules or class description may be disqualified.

7) The show chairman reserves the right to adjust any class and/or premiums offered. (For example: if sufficient entries are made for one stated color class for extracted honey to create two color classes, then two separate classes would be created with appropriate ribbons and cash awards).

8) Competition between local bee clubs is encouraged. An award will be presented to the local bee association who's members earn the highest number of points based on the number of quality products entered in the show. The following point system will be used: 1st prize - 3 points, 2nd prize - 2 points, 3rd prize - 1 point. If clubs are tied, the 1st place winner will be the club with the most 1st place awards in the show. If a tie still exists, the club with the most exhibits in the show will win.

Premium List

Individual Classes: Ribbon and Cash Award
Division Champion: Ribbon and Cash Award
Best in Show: John V. Lindner Award
Best Club Showing: I. Barton Smith Award

Premium Cash Awards:

1st	2nd	3rd	4th	5th
$12	9	6	4	2

Division I HIVE PRODUCTS

9) All entries must be the product of the exhibitor's bees and have been produced within a 12 month period prior to entry.

10) All honey exhibited must have been gathered and ripened in a natural way by honey bees.

11) An entry consists of 1 jar, container, frame, block, etc.

12) All extracted, chunk and finely granulated honey, and pollen pellets must be exhibited in 1 lb. glass or clear plastic jars, except Class 1. Beekeepers entering the first time in class 1 only may exhibit honey in 1 pint glass canning jars or 1 lb. glass or plastic honey jars.

PREMIUMS

Beekeepers entering for the first time

Class 1 - Extracted Honey

Beekeepers with 10 colonies or less

Class 2 - Extracted Honey - Water White thru Extra Lt.
Class 3 - Extracted Honey - Lt. Amber
Class 4 - Extracted Honey – Amber thru Dark Amber
Class 5 - Extracted Honey - Dark

Beekeepers with 11 colonies or more

Class 6 - Extracted Honey - Water White thru Extra Lt.
Class 7 - Extracted Honey – Lt. Amber thru Amber
Class 8 - Extracted Honey – Amber thru Dark Amber
Class 9 - Extracted Honey - Dark

Open to all

Class 10 - Comb Honey - Square Section
Class 11 - Comb Honey - Round Section
Class 12 - Cut Comb Honey in clear plastic box
Class 13 - Chunk Honey in wide mouth 1 lb. Jar
Class 14 - Finely Granulated Honey in regular or wide- mouth 1 lb. jar
Class 15 - One Shallow or Full Depth Frame Honey - must be protected with plastic wrap or

Class 16 - Beeswax Block 2 lbs. minimum
Class 17 - Dry Pollen Pellets in 1 lb. honey jar

Division Champion: Ribbon $10
Division I Total: $571.00

Division II ARTS AND CRAFTS

17) All entries must have been made or produced by the exhibitor.

18) Label for Honey Container - One marketable container of honey, any size, any form, WITH LABEL designed by the exhibitor and affixed to the container. The container, unless opaque, must contain honey. Commercial stock labels are prohibited. Apiary and/or exhibitor name is permitted on the label.

19) Creative or artistic endeavor in Class 23 must prominently feature the honey bee, beekeeping or pollination. (Formerly the "Presidents Prize")

20) Photography - A single black and white OR color print 5" x 7" minimum, suitably framed or mounted, pertaining to beekeeping.

21) Equipment or Gadget - Any original tool or equipment useful in beekeeping. A written description giving details of construction, materials, cost and labor MUST ACCOMPANY THE ENTRY.

oney Wine - Entries must be a least 12 months old and shall be exhibited in unlabeled standard 750 ml. or "fifth" wine bottles. Exhibitor must state whether entry is straight (honey-and-water "must" only) or augmented (honey-and water "must" plus fruit juices, herbs, spices, etc.) Allowed ingredients in all classes - sulfiting, yeast nutrients/energizers, tannin, citric acid or acid blends.

22) Gift arrangements/packs must include one or more products of the hive but may also include other items that enhance the appeal or promote the use of hive products. Personal gift arrangements should be suitable for personal gift use regardless of commercial applications, and should be in a box, basket or other suitable container. Mailable gift packs should be suitable for commercial applications and will be judged on mailability.

PREMIUMS

- Four Molded Beeswax Candles
- Four Dipped Beeswax Candles
- Four Rolled Beeswax Candles
- Artistic Beeswax - candles, figurines or other forms, at least 1½ lbs.

Label for Honey Container
-Artistic creation or Craft featuring the honey bee, beekeeping or pollination.
- Photography
- Equipment or Gadget
- Honey Wine - Sweet Mead, one bottle
- Honey Wine - Dry Mead, one bottle

PREMIUMS

- Honey Wine - Augmented Mead, one bottle
- Personal Gift Arrangement of honey bee products
- Mailable Gift Pack of Honey Bee Products

Division II Champion: Ribbon $10
Division II Total: $439.00

Division III YOUTH DIVISION

PREMIUMS

Exhibitors age 18 or under
- Extracted Honey (As in Div. I)
- Bee Crafts (As in Div. II)
- Honey Cookery (As in Div. IV)

Division III Champion: Ribbon $15

Division III Total: $81.00

Division IV HONEY COOKERY

13) Entries in all classes must use honey as the majority sweetener with the following exceptions: frostings, fillings, glazes, dusts and meringue may contain up to 100% sugar. Honey used in entries does not need to have been produced by the exhibitor. Non-beekeepers are encouraged to enter honey cookery..

14) Mixes and packaged prepared foods are not permitted.

15) Each honey cookery entry must be accompanied by TWO copies of the recipe for the entry. The ingredients in the entry must match the recipe. Recipes must not contain the exhibitor's name or other personal identification. Please identify the origin of the recipe (e.g. "personal", "National Honey Board")

16) Plates and protective covers must be supplied by the exhibitor.

PREMIUMS

-Cake - One unsliced cake that may be unfrosted, frosted, filled, glazed or dusted.
- Cookies - 12 drop, refrigerator, rolled or filled cookies that may be unfrosted, frosted, glazed or dusted.

- Cookies - 12 bar or sheet cookies (brownies, date
- bars, baked granola, etc.). May be unfrosted, frosted, glazed or dusted.
- Pie - One unsliced pie.
- Candy - 12 pieces. May be cooked, uncooked, or may be candied peels and candied fruits.
- Yeast Bread (Non Sweet) - One unsliced loaf or 9 rolls.
- Yeast Bread (Sweet) - One unsliced loaf, coffee cake, tea ring, or 6 Danish or sweet rolls.
- Quick Bread (Sweet) - One unsliced loaf. Examples are: banana bread, nut bread, etc.
- Quick Bread (Other) - One unsliced coffee cake, tea ring, 6 doughnuts or 6 muffins.
- Jellies, Jams, Preserves or Conserves - 1/2 pint or 1 pint in a jar, sealed with lid or paraffin.
- Condiments, Salad Dressings, Barbecue Sauces - One half-pint or one pint in glass jar. Examples are: catsup, pickles or relishes.
- Any other entry - honey cookery

Division Champion: Ribbon $10
Division IV Total: $406.00

Grand Total: $1,497.00

♦♦♦

NOTICE

Entries for the Honey Show must be received before 9am on the day of the meeting, Saturday, October 15, 2005.

Entries for the Honey Cookery category must use honey for the majority sweetener – see the above rules for exceptions . None-Beekeepers are encouraged to participate in this category.

Meeting Location:

MD Department of Agriculture
50 Harry S. Truman Parkway
Annapolis, MD 21401

Directions:

Route 50 to Annapolis, Take either Rt 450 (West St) or Rt 665 (Aris T. Allen Blvd) south to Riva Road, then west on Riva Rd to Harry S. Truman Pkwy. Right on H.S.Truman Pkwy to MDA.

BEES – 1; TERMITES – 0

By Loyd Luna

It was hard to imagine a bee colony in worse condition than this one, which I found in early June in Tennessee.

I asked the owner: " How are your bees doing"? He sheepishly replied: "Not too well; the last of my three colonies fell over." Why and when was the next obvious question. "Don't know why, but it was probably in January." The colony had not been opened in the last six years, yet bees were busy coming and going from almost any place they wished. Wow! A colony that can survive Varroa and tracheal mites, extensive rainfall, and who knows what else, is surely a valuable thing. After extracting a promise from him that I could bring back to Maryland a queen next spring, I agreed to take a closer look.

What I quickly found was an active colony of termites! Happily coexisting along side the bees, they had eaten away almost the entire bottom board, much of the brood chambers, and some of the wood frames. Plastic frames probably gave the bees a significant advantage. Termites had obviously been responsible for the toppling of the colony.

That did not deter the very productive queen from laying an almost perfect brood pattern, nor the bees from collecting lots of nectar; I estimated more than 100 pounds of honey.

Using some new wood ware, I reassembled two brood chambers and one medium super with five frames of honey, but lost some comb that had shifted when the colony fell over. I salvaged two frames of capped honey for the owners use. The owner, bees, and visitor were all pleased with the outcome. The morale of the story: Apis mellifera is a tough cookie and can survive some pretty miserable conditions.

Loyd Luna produces only comb honey and sells it at the local farmers market in Arnold, Maryland.

♦♦♦

Meet Ernesto Guzman

Dr. Ernesto Guzman grew up in Mexico where he started to keep and study bees in 1978. He graduated as a DVM in 1982 and got MS and PhD degrees in Entomology from the University of California at Davis in 1989 and 1992, respectively. He has worked for several institutions including the University of California, the Mexican Ministry of Agriculture, the National University of Mexico, and is currently a professor of Apiculture at the University of Guelph in Canada.

Dr. Guzman has ample academic and research experience. He has taught courses in Apiculture and Genetics and has conducted various research projects. During the course of his career he has graduated several M.S. and Ph.D students. His research has been focused on the genetics, behavior, and parasitic mites of honeybees. His studies have contributed to the understanding of the mechanisms that confer resistance to honey bees against varroa mites as well as to the understanding of the genetics of defensive behavior.

Dr. Guzman also developed selective breeding methodologies with which three strains of bees were developed. These bees produce 25% more honey and are 50% less defensive than unselected strains of bees.

Ernesto Guzman is author and co-author of more than 140 publications, including scientific and trade journal articles, as well as book chapters and proceedings summaries and has received numerous honors and awards.

♦ ♦ ♦

Beeyard Basics:

Checklist from article in BUMBA Newsletter by David Morris

October Checklist

- Install mouse guards (check for mice in the hive first). Wood guards should have notches turn up, not down.
- Feed light hives with heavy syrup..
- Provide all hives 2 gallons sugar syrup treated with Fumidil-B (fumagillin).
- Treat with grease patty (for Trachael mite).
- Test for Varroa and treat if necessary.
- Unite weak hives with strong (not weak with weak).
- Consider re-installing bottoms on screened bottom boards.
- Hives with solid bottom boards should be tilted forward.
- Raise the outer cover 1/8".
- Hold down the outer cover with a brick or rock to prevent storm wind blow-off.

November Checklist

- Remove all Varroa treatments (Apistan™, Coumophos™, anything else you are using)
- Remove syrup feeders.
- Remove all excess hive bodies
- Complete as early as possible

Get the Grill Fired Up for this Honey of a Contest

The second annual "HONEY OF A BBQ TAILGATING CONTEST" sponsored by the National Honey Board September 12 – December 1, 2005
Do you love to tailgate? Think your HONEY BBQ tailgating recipe has the right stuff? Enter it in the "HONEY OF A BBQ TAILGATING CONTEST."
Tailgate recipe entries may include sauces, glazes and marinades that include at least 1/3 cup 100% pure honey.
The winners will be selected by FOX analyst and former NFL player Tony "The Goose" Siragusa.

The grand prize winner will receive $1,000, second place receives a BBQ gift basket worth $250 and third place receives grilling accessories worth $100.
There are two ways to enter:

1. Entrants can MAIL their name, address, phone number and recipe to:
   " HONEY OF A BBQ TAILGATING CONTEST"
   400 Capitol Mall, Suite 2640
   Sacramento, CA 95814
2. Send their entry ONLINE at www.honey.com

For more information and official contest rules, go to www.honey.com

EAS August 1-5, 2005, Kent, Ohio

"If you're new to beekeeping and want to take it to the next level, I suggest attending EAS," said David Bernard at a meeting earlier in the year. This statement kept coming back to me, and coupled with the fact that I have thoroughly enjoyed the one day beekeeping events I have gone to in Maryland so far, led me to sign up for the full week at EAS this year. And I was not disappointed.

The first part of the week was officially the "Short Course" and the latter part of the week was the "Conference." Once there, however, these distinctions seemed pretty artificial, as the nature of the lectures, workshops, and beeyard instruction seemed all of one piece. In fact, I would say the Short Course was attended by more advanced beekeepers than beginners. Like a smorgasbord, the class offerings were so many and so varied that it is hard to give a quick overview of it. Over 100 lectures, classes, and workshops were offered during the 5 days at Kent State University on just about any topic in beekeeping you could think of. Take the subject of queens, for example. There were 15 classes on the queen alone: "The Queen—The Soul of the Hive" and "Weird Queens" by Joe Latshaw, "Instrumental Insemination Fundamentals" by Sue Coby, "Sperm Preservation" and "Queen Anatomy" by Anita Collins, "Queen Physiology" by Dewey Caron, "Practical Aspects of Queen Production" by Dave Tarpy, "Queen Maintenance" by Larry Connor and Dewey Caron, "Commercial Queen Production in Mississippi" by Richard Adee, "Evaluating Queens" by Sue Coby and Jennifer Berry, "Queens, What I See In Maine" by Tony Jadczak, and more.

After dinner one evening, I stumbled into a meeting on the Master Beekeeper test and sat in to see what I could learn. Clarence Collison, who currently heads up the testing, gave an excellent overview of the 4 parts of the test—written, lab, oral, and field—giving advice as to what parts are historically the most difficult to pass—the disease identification in the lab part of the test. I got a chance to see the beekeepers that were going for it.

Taking to heart what Clarence said about the relative lack of knowledge most beekeepers have about disease, that next day for an entire afternoon, I attended a series of 4 workshops on disease identification offered by Tony Jadczak and John Grafton. They used lectures and slides; had tables with a multitude of examples of diseases and pests set out on it, from samples of frames with American foulbrood to samples of small hive beetle; finally ending up in the apiary for hive inspections of disease. After those classes, when I returned home I definitely felt more confident about spotting disease than I did before.

What stands out the most for me, however, was not any one thing I learned, though there were many. It was more meeting the people and immersing myself in that indefinable thing you might call "bee culture"—the people talking bees; the vendors with equipment; the hives in the beeyard. Estimating roughly 400 people attending, they were a diverse crowd—from the advanced to the beginner, from those operating a successful business from bee products to the hobbyist. Most people were friendly and open to new comers, though I would say there does exist an "old boy" network in spots that can take some doing to break into.

For me, it was especially a pleasure to hear lecture and get a chance to talk one-on-one with some of the well known names of the beekeeping world, people whose articles I have read numerous times—like Malcolm Sanford, Sue Coby, Clarence Collison, Larry Conner, etc… Watching someone like Sue Coby work a hive while giving instruction on what she was doing was truly educational, and I set out to observe as many different teachers in the apiary as I could. I was amazed at the speed and economy of effort with which these experts would move in and out of hives, getting the job done in a fraction of the time I would have thought possible.

Was it worth it? Do I plan to go back? Maybe not next year, when EAS 2006 moves to Georgia, but when it comes to Delaware in 2007, and then Virginia in 2008 …definitely!

♦ ♦ ♦

NEW PHEROMONE CREATES BUZZ ABOUT THE CLOUT OF OLDER BEES

EAST LANSING, Mich. – A recent discovery unveils the chemical secret that gives old bees the authority to keep young bees home babysitting instead of going out on the town.

A hard-to-detect pheromone explains a phenomenon Michigan State University entomologist Zachary Huang published 12 years ago – that somehow older forager bees exert influence over the younger nurse bees in a hive, keeping them grounded until they are more mature, and thus more ready to handle the demands of buzzing about.

The work that identifies the chemical, "Regulation of Behavioral Maturation in Honey Bees by a New Primer Pheromone" is publishing in Proceedings of the National Academy of Science Biological Sciences, Population Biology, Early Edition the week of Nov. 29.

"If the older ones don't keep them in check, the young ones can mature too quickly," Huang said. "It's kind of the same thing as with people, you need the elders to check on the young, even if the young are physically able to go out on their own, it's not the best situation for anybody and now we know how it works."

Huang worked with a team that spanned from the United States , France and Canada to explain how the bees kept an exquisitely consistent balance between the ones that go out to collect nectar and pollen and defend the hive, and those that stay home and nurture the larvae. Huang had documented that this balance is controlled by the elder bees, those that typically spend the final one to three weeks of their five-week lifespan out in the field.

Experiments showed that if a significant number of forager bees didn't come home, the young nurse bees would mature ahead of schedule and head out to become foragers themselves. If the older bees were kept inside more than usual – as in an extended rain shower – fewer young bees would mature, but instead stick to brood care.

But the question was always, why? Pheromones are a chemical signal emitted by animals, insects and humans. Some, called releaser pheromones, are like a quick conversation that changes behavior, such as those that inspire sexual attraction.

Since releasers change behaviors immediately, they historically have been easier to identify. Hundreds of releaser pheromones have been chemically identified, whereas only four (including this new one) have been identified as primer pheromones. Primer pheromones are more difficult to work with because they imparts behavioral changes in a much longer time scale, taking days or sometimes weeks to see an effect. Huang and his associates spent years futilely searching for a primer pheromone. After many dead ends, the group came upon a crucial difference between forager bees and nurse bees: Forager bees carry a mother load of a chemical called ethyl oleate in the abdominal reservoir in which they store nectar.

That, Huang said, led them to identify ethyl oleate as another kind of pheromone – called primer pheromone.

Forager bees load up on ethyl oleate when they're buzzing about gathering food, but don't digest it. The forager bees feed the chemical to the worker bees, and the ethyl oleate keeps them in a teenage state, sort of like being grounded to watch the younger siblings.

As the old bees die off, the chemical no longer is fed to nurse bees. Eliminate ethyl oleate and the bees mature into foragers.

"This provides clear insight into how a bee colony works," said Gene Robinson, G. William Arends professor of integrative biology and director of the neuroscience program at the University of Illinois at Champaign-Urbana. "What's most impressive about a honey bee colony is it is able to respond to changing conditions and alter its division of labor. When you think of that type of flexibility and adaptability, you immediately think, 'who's in charge'? People from many scientific and engineering endeavors are fascinated by localized decentralized decision making."

Huang said the system makes sense for the health of the hive. Young bees – those in the first two to three weeks of life – are biologically better suited for brood care, thanks to some boosted blood protein.

Bees forced out too early aren't great navigators, and since foraging is dangerous, they risk dying before their time.

"Our idea has never been disproved, but the lack of mechanism drove me crazy," said Huang. "Now we know the specific chemical that controls the behavior of honey bees for the good of the whole population."

In addition to Huang and Robinson, the paper's authors are Isabelle Leoncini, Yves Le Conte, Didier Crauser, Guy Costagliola and Jean-Marc Bécard, of the National Institute of Agricultural Research in Avignon, France; Mianwei Wang, Erika Plettner and Keith Slessor of Simon Fraser University in Burnaby, Canada; and Amy Toth of the University of Illinois at Urbana-Champaign.

The research was funded by the National Institute of Health. Huang's research also is supported by the Michigan Agricultural Experiment Station.

♦ ♦ ♦

Africanized Bee Testing:

To determine if a colony is Africanized: To send bee samples, place a minimum of 20 bees (20-50 is plenty) in a tightly sealed container (glass or plastic) filled with just enough alcohol (70% ETOH is fine) to cover the bees. The bottle itself should be labeled with sample name and date. Please indicate where the results should be sent. The preliminary test results should be available within a few days. If these tests indicate that the sample may be Africanized, a further test will be performed and it may take quite some time before results are ready - approx. 3-4 weeks. If you have any additional questions, please feel free to contact Monica Chambers. The samples should be addressed to Mona Chambers.

USDA-ARS
Carl Hayden Bee Research Center
2000 East Allen Road
Tucson, AZ 85719

Phone: (520)670-6380 ext.105
Email: mchambers@tucson.ars.ag.gov

It's all the Buzz!

Penn State is conducting a series of surveys of beekeepers in the MAAREC region. The responses from the last winter survey were very low. You can view our preliminary results as a PDF on the MAAREC site by linking here: http://maarec.cas.psu.edu/ .We are asking that you consider taking the time to fill out last winter's survey if you have not yet done so. This can be done on line simply by navigating to this URL: http://web.survey.psu.edu/beekeeper/. . If you have any questions or concerns, please feel free to contact: Maryann Frazier Email: mxt15@psu.edu.

Quote of the Year

"... getting beekeepers to cooperate and agree on any one thing is like herding cats." (ABJ Jan 2005, p.52)

Here is one for you to consider.

Pricing Your Honey

Have you wondered if you are packaging, pricing and marketing your honey to your best advantage? Here is a bit from a recent issue of *House and Garden:*

"MILK AND HONEY -

I've been told that a tablespoon of orange blossom honey ($15 for 8 oz., behivebeeproducts.com) before bed ensures a peaceful night's rest. Add it to a cup of warm milk, which supposedly lulls you to sleep, and you have a tasty recipe for sweet dreams."

What?,… and you are selling your 16 oz. jars for $4??

♦ ♦ ♦

2005 MSBA OFFICERS & DIRECTORS:

President: David Smith (410) 556-6222
1ST Vice President: Carol Johnson (301) 432-6413
Secretary: Allen Hayes (410) 489-2835
Treasurer: Christine Goldsmith (410) 635-2867
MD EAS Director: Barry Thompson (301) 947-4652

Directors: Past Presidents:
Robert Crouse (410) 265-7999 Barry Thompson (301) 947-4652
Chuck Huselton (410) 592-6598 Dean Burroughs (410) 546-2910
Adele Morris (301) 725-6185

COUNTY VICE PRESIDENTS:

Anne Arundel: Lloyd Luna (410) 757-5797
Allegeny: David L. Hall (301) 729-8220
Baltimore: Jerry Fischer (410) 682-3251
Baltimore City: Bob Crouse (410) 265-7999
Calvert:: Bob Cory (301) 855-8431
Caroline: Paul Dill (800) 573-1713
Carroll: Steve McDaniel
Charles: Edward Clements (301) 934-8280
Cecil: Jeff Powell (410) 392-5985
Dorchester: Oliver Collins (410) 943-3448
Frederick: Ernie Miner (301) 898-3140
Garrett: Madonna Poole (301) 334-7670
Harford: Chip Simpson (410) 399-0909
Howard: Wayne Esaias (301) 854-3180
Kent:: Matt Redman (410) 778-2385
Montgomery: Bill Miller (301) 926-3590
Prince George's: David Morris (301) 725-6185
Queen Anne's: David Smith (410) 556-6222
Somerset: George Dreyer (410) 623-2221
St Mary's: Harry Dalton (301) 475-8224
Talbot: Winslow Womack (410) 745-9589
Washington: Jim Baker (301) 223-8681
Wicomico: Dean Burroughs (410) 546-2910
Worcester: Wes Townsend
Washington D.C. Stanley Nesheim (202) 244-8794

LOCAL BEEKEEPING ASSOCIATIONS:

ALLEGHENY MOUNTAIN BEEKEEPERS ASSOCIATION
President: Richard Cutter Telephone:

ANNE ARUNDEL COUNTY BEEKEEPERS ASSOC.
President: Lloyd Luna Telephone: (410) 757-5797

APPALACHIAN BEEKEEPERS ASSOCIATION
President: Jerome Cassidy Telephone: (301) 334-8631

ASSOC. OF SOUTHERN MARYLAND BEEKEEPERS
President: Tom Williams (301) 884-5230

BOWIE-UPPER MARLBORO BEEKEEPERS ASSOC.
President: David Morris Telephone (301) 725-6185

CARROLL COUNTY BEEKEEPERS ASSOCIATION
President: Mark Glannon (410) 552-6013

CENTRAL MARYLAND BEEKEEPERS ASSOC.
President: Gary Bush Telephone: (410) 667-6871

HOWARD COUNTY BEEKEEPERS ASSOC.
President Allen Hayes Telephone (410) 489-2835

HAGERSTOWN VALLEY APIAN SOCIETY
President: Bill Troup III Telephone: (301) 223-9662

MONTGOMERY COUNTY BEEKEEPERS ASSOC
President: David Bernard. Telephone:

SUSQUEHANNA BEEKEEPERS ASSOCIATION
President: John Knapstein Telephone: (410) 692-9823

MDA OFFICE OF APIARY INSPECTION

Jerry Fischer (410) 682-3251

MSBA HOME PAGE:

http://iaa.umd.edu/mdbee/main/home.html
Jon Bealer (410) 357-9166

BEELINE EDITOR:

John D. Moyer (410) 923-0190
jmoyer28@comcast.net

THE BEELINE
♦♦♦
John D. Moyer, Editor
713 Doages Dr.
Millersville, MD 21108

Address corrections requested