



EAS Program Book

Pass 11

7/10/2013

EAS 2013 CONFERENCE

**Eastern Apicultural Society
West Chester Pennsylvania
August 5-9, 2013**



<BrushyMountain>

2013 CONFERENCE PROGRAM

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Jeff Burd

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— *Tamara Zemlo*

Message from Linda



Welcome!

It is my extreme pleasure to welcome you to my neighborhood. It has been nine years since EAS was last here, and what a ride we have had since then, travelling from Georgia, to northern Vermont, to western Kentucky, and so many places in between.

I am not going to overwhelm you with the plethora of activities that we have planned for you this week—a short course, conference, apitherapy symposium, apiary activity, bee Olympics, microscope sessions, movie night, core exam challenge, workshops, and panel discussions; nor am I going to swamp you with the names of our top-notch speakers (there are over 72 of them). There is no way I can adequately describe the 173 talks that we have planned, nor name the 52 vendors who will be here from Wednesday through Friday. No, that would be too great a deluge of information.

I have two goals for you this week—to learn and have fun. We have planned an edifying, energizing, rich, and enjoyable experience for you. The moment you approach the Sykes Student Union building for registration, you will be greeted by workers stationed at the entrance who will consider your demeanor and, if not deemed truly friendly, you will be marked. Then as you enter the building, other workers will greet you, shake your hands, and joke with you. Should that not change your demeanor, when you approach the registration, be ready for the gigantic group hug. Don't be that person. If you want to avoid the group hug, leave your troubles and worries at the border.

I look forward to the EAS convention each year—that is the only time for me to see many of you. Please stop in, say hello, and catch up. If this is your first time at EAS, look me up, and I will introduce you to some of the most exciting people in the world. As always, if you have any problems or suggestions to make the week a better event, let me know. At the end of the week, we want you to leave with your noggin filled with information and fun times. EAS PA will be an awesome, great experience.

Jim Bobb, EAS Chairman

AT A GLANCE

Sunday	Registration & Information Desk 3:00-7:00 p.m.
Monday	Registration & Information Desk 7:00 a.m.-4:30 p.m. Short Course 8:00 a.m.-5:30 p.m. Q&A with Speakers 7:30 p.m. Film Night 7:30 p.m.
Tuesday	Registration & Information Desk 7:00 a.m.-7:00 p.m. Short Course 8:00 a.m.-4:30 p.m. Bee Olympics 4:45-5:30 p.m. Certificate Ceremony & Social 7:00 p.m.
Wednesday	Registration & Information Desk 7:00 a.m.-4:30 p.m. Short Course 8:00 a.m.-5:30 p.m. Conference 8:00 a.m.-5:30 p.m. Vendor Exhibit 10:00 a.m.-5:30 p.m. Brandywine Picnic Park Social 5:30-9:00 p.m.
Thursday	Registration & Information Desk 7:00 a.m.-4:30 p.m. Conference 8:00 a.m.-5:30 p.m. Apitherapy Symposium 8:00 a.m.-5:30 p.m. Vendor Exhibit 9:00 a.m.-5:30 p.m. Honey Award Dinner & Live Auction 6:30-9:30 p.m.
Friday	Registration & Information Desk 7:00 a.m.-noon Conference 8:00 a.m.-noon Workshops 1:30-5:30 p.m. Vendor Exhibit 9:00 a.m.-1:00 p.m. Reception & Banquet 6:00-9:00 p.m.

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Registration Schedule

	EAS Registration Open at Sykes	Dorm Keys at Tyson Residence*
Sunday	3:00 p.m.– 7:00 p.m.	3:00 p.m.– 10:00 p.m.
Monday	7:00 a.m.– 4:30 p.m.	7:00 a.m.– 10:00 p.m.
Tuesday	7:00 a.m.– 7:00 p.m.	7:00 a.m.– 10:00 p.m.
Wednesday	7:00 a.m.– 4:30 p.m.	7:00 a.m.– 10:00 p.m.
Thursday	7:00 a.m.– 4:30 p.m.	7:00 a.m.– 10:00 p.m.
Friday	7:00 a.m.– noon	

* After hours, dorm keys are available at Security, located at Tyson Hall. A Security Guard will be on duty from 8:00 p.m. –4:00 a.m. The phone number at the front desk of Tyson Hall is 610-436-2412. If you are lost or cannot find the location for dorm check-in, please call 610-584-6778.

Society Business Meeting Schedule

EAS Board of Directors' Meeting	Tuesday	8:30-11:00 p.m.	Brandywine 4
EAS Annual Business Meeting	Friday	11:00-noon	Sykes Theater

Annual Honey Show Schedule

Drop Off Show Entries (Sykes Registration Area)	Top Awards Presentation	Show Open to Public	Post-Show Pick Up of Entries
Tuesday, August 6 1:30-4:30 p.m.	Thursday, August 8 <i>Evening Social</i> 6:30-9:30 p.m.	Thursday, August 8 1:30-5:00 p.m.	Friday, August 9 After 3:15 p.m.
Wednesday, August 7 10:30 a.m.-noon & 1:30-3:00 p.m.		Friday, August 9 9:00 a.m.-3:15 p.m.	

Master Beekeeper Schedule

Exam Preview	Wednesday	4:00 p.m.– 5:30 p.m.	Sykes 252
Field Exams	Wednesday	Noon– 5:30 p.m.	Beeyard
Exams	Thursday	8:00 p.m.– 5:30 p.m.	Merion 109 (Lab) Merion 112 (Written) Sykes 306 (Oral) Sykes 303 (Oral)
Annual Meeting	Friday	7:00 a.m.– 8:00 a.m.	Sykes 252
Exam Review (Candidates receive scores and get questions answered.)	Friday	4:15 p.m.– 5:00 p.m.	Sykes 252

Short Course Overview

The Short Course has both a Basic (Core) curriculum and tracks of Electives, which provides something of interest to all beekeepers, from the new-to-beekeeping to bee instructors, and everything in between. Green-minded beekeepers, top-bar hive aficionados, queen-rearers, and anyone who yearns for bee knowledge will find something for them.

New this year: the Core Level has an optional examination for Certification. Students wishing to receive the Core Beekeeping Certification must pass both the written and field tests.

There are no tests for the electives. Anyone who enrolls in the Short Course will receive a Letter of Completion at the end of the course.

Core Classes

Core classes are intended for new beekeepers, those who have just started beekeeping in the past three or four years, or others who would just like to review some topics. Core classes have information that may be covered on the certificate test. Certificate classes include biology of the individuals in the hive, biology of the colony, diseases I & II, noninfectious disorders in the hive, good neighbor policies and BMP, honey bee nutrition, basics of processing honey, fall and winter management, swarming and spring management, and products of the hive.

Classes in the Apiary

A series of basic classes in the apiary, such as reading a frame, finding a queen, great patterns, poor patterns, common hive problems (drone-laying workers, drone-laying queens, wax moths, hive beetles, Varroa mites, mice, etc.), combining hives, splitting hives, how to replace queens, supersedure and swarm cells, feeding hives, etc.

One-on-One in the Apiary Field Certificate Test (Monday and Tuesday til 3:15PM)

Completely optional and at no extra cost—sign up for schedules to meet one-on-one (up to four-on-one) with a beekeeper in the beeyard. Students must be able to demonstrate that they can light their smokers; open a hive; remove a frame; and identify workers, drones, eggs, larva, pupa, pollen, and honey/nectar. If queen

is on the frame, student must be able to identify it. Students must be able to pick up a drone. The Field Test is a requirement for Core Beekeeping Certificate.

Core Beekeeping Certificate Test (Tuesday 3:45PM)

Completely optional and at no extra cost—exam with about 25 questions—based on the core classes. Students need an 80% to pass.

Reception and Certificate Ceremony (Tuesday 7:00PM)

Join all of us for a honey ice cream social followed by a graduation address by Dewey Caron and presentation of certificates.

Electives

Electives are for those who have been keeping bees for several years or are looking for more specialized or advanced topics. Classes are offered on top-bar hives, value-added products, sideline interest, queen rearing, growing green bees, microscopes and bee biology and behaviour.

Top-Bar Hives

The beeyard part of Top-Bar Hive instruction is limited to 25 people. Please reserve your spot at registration. Once the first session is full, we will offer afternoon sessions run by other beekeepers.

Train the Trainer

The Train the Trainer day-long session is designed for instructors and leaders of local, regional, and state-wide beekeeper organizations. You must reserve your spot on the registration form. Attendees are expected to stay in the session. Please bring a sample syllabus to critique.

Microscope

Text to be written

Short Course Overview *continued*

SC101 Siting Hives, Good Neighbors, & BMP

Honey bees can be kept almost anywhere there are nectar and pollen producing flowering plants, but what are the ideal spots? How should the hives be positioned? Sun or shade? And, more importantly, what can you do to get along with your neighbors? Are there any special considerations for urban beekeepers? What are Best Management Practices (BMPs)? Are there local ordinances regarding beekeeping?

SC102 Equipment & Construction

After a quickly review of standard bee equipment, discover what other equipment is available to manage hives. Explore queen excluders, frame spacers, and different types of veils and hive feeders. Wax foundation or plastic? What are some tips on assembling and painting equipment?

SC111 Biology of Individuals in the Hive

Learn about the development and anatomy of the three castes of bees: workers, drones, and queens. What colors do bees see? How are queens produced and mated? How do the bees sting? This session covers the individuals in the hive.

SC112 Biology of the Colony

Honey bees are social insects; collectively they regulate temperature, rear brood, and reproduce (swarm). As a worker bee ages, she takes on different tasks, such as cell cleaning, nursing young, queen tending, comb building, food processing, undertaking, ventilation, guarding, and foraging. Special scout bees will recruit others to forage with a waggle dance. Discover how 60,000 females can work together with no leader.

SC121 Reading Hives & Frames

Beekeepers must know what is going on in their hives. What can you discover by just watching the hive? When you open a hive, what do you look for? What does a good frame look like, and what is bad? What can the frame tell you about the state of the hive? Let's open the hive and see. *Meet in Apiary.*

SC122 Hive that Swarm

Learn the basics of swarming and observe ways to hive a swarm of bees that miraculously appears in the backyard. *Meet in Apiary.*

SC123 Nucs, Splitting Hives, & Combining Hives

Nucs are just small hives, but they are extremely useful to start a new hive, control swarming, hive a swarm, and raise a new queen. You can also control swarming and create a new hive by splitting a hive. But, what can you do if you have a weak hive or too many hives? All of these techniques will be demonstrated in this session. *Meet in Apiary.*

SC124 Management through the Seasons

What are your beekeeping tasks through the year? When should you feed the bees or stop feeding them? How do you winterize your bees? When should you put on honey supers? Or, take them off? When do I need to be concerned about pests? Put together a timeline and checklist for your hive. *Meet in Apiary.*

SC131 Feeding Bees

Honey bees require food to survive and thrive. Vincent Aloyo, EAS Master Beekeeper, will discuss if and when you should feed your bees. Aloyo will describe different scenarios under which you may chose to feed your bees, various food stuffs (sugar syrup, high fructose corn syrup, fondant, pollen substitute) that should or should not be fed to your bees and a variety of types of feeders.

SC132 Products of the Hive

The bee hive is often thought of as only a source of honey, but the bees also collect pollen and produce propolis, wax, and royal jelly. Find how the bees make these products and what are their uses.

SC133 Honey Processing

Discover several ways to harvest honey with minimal equipment, with and without an extractor. Join in the live extraction demonstration.

SC141 Noninfectious Disorders in the Hive

Unfortunately, things can happen to a hive. Discover the hive pests (larger than mites) and noninfectious disorders in the hive. Queenlessness, laying workers, starvation, overheated bees, chilled brood, spotty brood, wax moths, mice, bears, fire ants, and pesticide kills are all covered in this session.

whole foods ad devon

Short Course Overview *continued*

SC142 Diseases Part 1 – Infections Brood Diseases

Honey bees, similar to other animals, do get sick. As a beekeeper, you must care for your bees. Vincent Aloyo, EAS Master Beekeeper, shows the differences between healthy and sick bees. In the first session of this two session sequence, you will learn to distinguish among several infectious diseases of developing honey bee brood, including American and European foulbrood, sac brood, and chalkbrood. Management and treatment options will be discussed.

SC143 Diseases Part 2 – Parasites and Adult Bee Diseases

In this second of a two session series, Vincent Aloyo, EAS Master Beekeeper, will discuss parasites, including tracheal and Varroa mites, and adult bee disorders, such as viruses, Nosema, and Colony Collapse Disorder (CCD). Management and treatment options, where available, will be discussed.

SC151 Take the Core Field Exam

Meet one-on-one (up to four-on-one) with a beekeeper in the beeyard. Be able to demonstrate that you can light a smoker; open a hive; remove a frame; and identify workers, drones, eggs, larva, pupa, pollen, and honey/nectar. You must be able to pick up a drone. A requirement for Core Beekeeping Certificate. *Meet in Apiary.*

SC152 Take the Core Written Exam

Take an exam to evaluate what you know or what you have learned from the Core Classes. A great way to confirm what you know and discover areas that you may want to pursue.

1/2 page vertical black and white ad available

Elective Class Descriptions

Top-Bar Hives

SC171 Top-Bar Hands-On Management

In the apiary. See first-hand how to build top-bar hives, syrup feeders, queen cages, pollen traps, and queen excluders. View the correct way to install bee packages, use syrup feeders, get straight comb, handle comb, avoid comb meltdowns, get the new colony established, pick the correct hive site, avoid blown-over hives, robbing, and get the colony ready for winter. This session is 1 hour 45 minutes.

SC172 Top-Bar Seasonal Management and Other Topics

Wyatt Mangum, author of *Top-Bar Hive Beekeeping: Wisdom and Pleasure Combined*, has built an operation with 200 top-bar hives and managed them for over ten years. Learn colony management: honey production; swarm control; requeening; IPM for varroa, small hive beetle, and wax moths; selecting hygienic bee stock; and comb storage without fumigants. How can you process and package honey from a top-bar hive? This session is 1 hour 45 minutes.

Green Bees, Healthy Bees

SC181 Overview and History of Organic, Natural, & Biodynamic Beekeeping

Biodynamics is a method of organic farming that emphasizes the holistic development and the interrelationships of soil, fauna, and flora as a self-sustaining system. Ben Bowers clarifies the organic, natural, and biodynamic concepts and the history of these approaches.

SC182 Natural Beekeeping and Certified Naturally Grown Requirements

Certified Naturally Grown (CNG) is a nonprofit organization offering certification tailored for small-scale, direct-market farmers and beekeepers using natural methods. Buddy Marterre, EAS Master Beekeeper from North Carolina, expounds the reason that he drafted the standards for the CNG apiary certification program and how it works. Learn about the program's guidance on best practices, the supportive community, and financial advantage. The CNG apiary standard emphasizes management without exposure to synthetic chemical treatments.

SC183 Easy Queen Rearing Techniques, Without Grafting

Warren Graham, second generation beekeeper from the local Chester County Beekeepers Association, has been running a small-scale queen operation for decades. Warren will define a step-by-step and easy way to produce local queens without grafting.

SC184 Local, Russian, Italian, Carniolan, Hygienic...Which Queen Should I Choose?

There are several choices available when it comes to queens. Which race is best? What are the hygienic queen options available now?

Green Solutions for Varroa Control

SC191 Why Treat for Varroa—Pros & Cons

Buddy Marterre, EAS Master Beekeeper from North Carolina, does not treat his hives for Varroa. Explore the pros and cons of treating (or not treating) for Varroa control.

SC192 Three Steps to Healthier Bees: Natural Size Cells, Proper Nutrition, and Local Genetics

Adam Schreiber, Past President of the Philadelphia Bee Guild, has an integrated plan to control Varroa mites that includes natural cell size, proper nutrition, and local genetics—and does use not any chemical treatments. Adam will demonstrate how to establish or regress honey bees to their natural cell size.

SC193 Varroa Control by Breaking the Brood Cycle

For the majority of their lives, Varroa mites are buried under the pupal cappings, making many treatments, such as powdered sugar and oxalic acid only partially effective, unless they are applied repeatedly. Some beekeepers have found that by simply providing a break in the brood cycle, the Varroa mites will be forced into the open and population growth will be curtailed. Steve Repasky, EAS Master Beekeeper and second generation beekeeper from Pittsburgh, shows how making splits, nucs, and simply caging the queen can be a nonchemical tool to control Varroa mites.

Elective Class Descriptions *continued*

Queen Rearing

SC201 Bee Biology for Queen Rearing

In the classroom, study the queen and drone biology, timelines, and background information needed to raise queens.

SC202 Equipment and Setup for Queen Rearing

In the apiary. Set up cell-starters, finishers, and mating nucs. See cloak boards and other queen-rearing devices in operation.

SC203 Grafting

Practice grafting from frames of several races or bees with hygienic traits. The cells will be placed in a starter colony—come back in a few days to check on them or attend **SC204 Check the Queen Cells** to see how many of your grafts took.

SC204 Check the Queen Cells

Pull the bars from the hives to see which grafts took. If you are staying in the area for a while, arrange with Elina L. Niño to pick up your successful queen pupae before they hatch.

Value-Added Products (and Bears)

SC221 Making Creams and Lip Balms with Beeswax

This two session interactive workshop will cover general information and basic steps for making products using beeswax, such as hand creams, foot creams, lotion bars, and lip balms. A live demonstration, making a couple of products, will be part of the workshop which will help attendees see the process first hand so that they are armed with the information needed to experiment on their own after the conference.

SC222 Making Creamed Honey

SC223 Mead-making 101

SC231 Handmade Soaps Using Honey & Bees Wax Part I

Hand-crafted soaps made using beeswax and honey are a great addition to the beekeepers line of products. Learn the basics of making soap from scratch using lye, fats, water, and your own honey and beeswax.

SC232 Handmade Soaps Using Honey & Bees Wax Part II; Plus Collecting and Using Propolis

Landi Simone will wrapup her hand-made soap discussion. But, don't throw away all that propolis you scrape from your frames! She'll show you how to clean it and use it in your products and as a medicinal extract.

SC235 Building a Bear-Proof Fence

Many areas of North America are plagued by bear damage to hives. Landi Simone will demonstrate her Ft. Knox approach to repelling these honey-loving pests.

Sideliner Topics

SC301 Hobbyist/Sideliner Marketing Techniques

Interested in setting up a road-side stand, selling products at local markets, or finding ways to get your name out to the community? Learn techniques to price your products and display them for optimal sales. Charlie Vorisek, Pennsylvania State Beekeepers Association President, has left his job and gone into beekeeping fulltime. He and his wife, Cathy, make their living from beekeeping at the other end of the state of Pennsylvania, in the Erie area. Find out how they do it.

SC302 Maximizing Honey Production

Michael Palmer manages 600+ colonies for honey. What system does Mike use to manage these hives and maximize the honey production in his Vermont apiaries?

Elective Class Descriptions *continued*

SC303 Considerations for Honey Houses and Extraction Rooms

Dennis Keeney has a two story, gravity fed, extraction facility with heating room located just 60 miles from West Chester. What are some of the things to consider when creating your own area for extraction? Many concepts are the same for small and big alike. Where are the bottlenecks and what can be done? What worked for Dennis—and what didn't?

SC304 Building a Profitable Bee Business

Dan Conlon, and his wife Bonita, run Warm Colors Apiary in western Massachusetts. In addition to regional honey, the Conlons make beeswax candles, offer educational classes, and sell beekeeping supplies. How did Dan grow the business and what were the growing pains? What are the pros and cons and difficulties that he deals with in each of these business sectors?

SC305 Nucs Are My Business

Nucs are not just for increases anymore. Michael Palmer has developed a system for overwintering nucs that works for him in Vermont. One of the ways to wean yourself from the need for outside bees in the early spring is to overwinter nucs using local queens.

SC306 Considerations when Expanding the Number of Hives

Zac Browning is a 4th generation commercial beekeeper with 20,000 hives in Idaho, North Dakota, and California. Although Zac is usually discussing issues with the EPA on pesticides or shepherding funds for research, he has agreed to put himself in the position of a small-scale beekeeper and offer advice on how to expand and grow a bee business.

SC309 Top Five Things to Do to Be Successful in Beekeeping

Michael Palmer and Dennis Keeney offer their advice on building a small-scale bee business. Bring your questions for a panel discussion with these men who have become icons for every beekeeper who meets them.

A Detailed Look at Bees

SC320 Requeening Considerations

Wyatt Mangum, University of Mary Washington, maintains 30 observation hives and has been conducting experimental work with bee behavior and queen cells and swarming. Wyatt will share his observations and the results of some of his experiments. How does the number of attending workers in queen cages affect queen acceptance?

SC321 How Bees See

Ever wonder how bees see? Most of us know that bees do not see the color red, but how do bees actually see light? Rick Fell, Virginia Polytechnic Institute and State University, will peel back the layers and decipher how it works.

SC322 How Bees Communicate

Bees communicate with dance languages and mixtures of chemical substances called pheromones. Maryann Frazier, Pennsylvania State University, will translate the languages, elucidate how pheromones are released into the hive or environment, and how they change the physiology and behavior of other bees.

SC323 A Unique Communication Study: House Hunting

Tom Seeley, Cornell University, has spent years researching how bees communicate and make decisions—especially the swarm the process. Always fascinating, Tom will edify us with some of his findings.

A Detailed Look at Pests

SC341 What Do We Know about Varroa Mites

Varroa mites are one of the most serious pests of honey bees and may be one of the main contributors to colony death. What has the latest research shown us about the biology of this mite?

Elective Class Descriptions *continued*

SC342 Small Hive Beetle Biology and Control

The small hive beetle is a bee pest that has infested hives in many areas. How do the bees and beetles interact? When do they become strong enough to take over the hive and make the bees abscond? Debbie Delaney, University of Delaware, will demystify their biology and control methods.

SC343 Understanding Nosema

Nosema ceranae has displaced *Nosema apis* in many areas. How can you tell if bees have a *Nosema* infection and does Fumagilin-B control it? Also, what does infection with *Nosema* do to the physiology and behavior of individual bees and how can these changes impact colony health? Holly Holt will discuss these questions. If you want to learn more after this session, join Holly in the microscope room, for M222 Microscopic Insights to *Nosema*, where you can dissect bees and quantify *Nosema* infections.

Train the Trainer

SC401 Train the Trainer

In this full day workshop, explore how to conduct an efficient bee school: improve content delivery, maximize student learning, and promote beekeeping. Discuss the right mixture of theory and practice; what makes a bad presentation; teaching young beekeepers; using the BEES network in your bee school; crafting a test; and putting it all together. This workshop is not about what to teach, but how to teach it.

Preregistration is required for the limited number of seats. The workshop is comprehensive—so all participants are expected to remain through the entire day.

Worcester Honey Farms

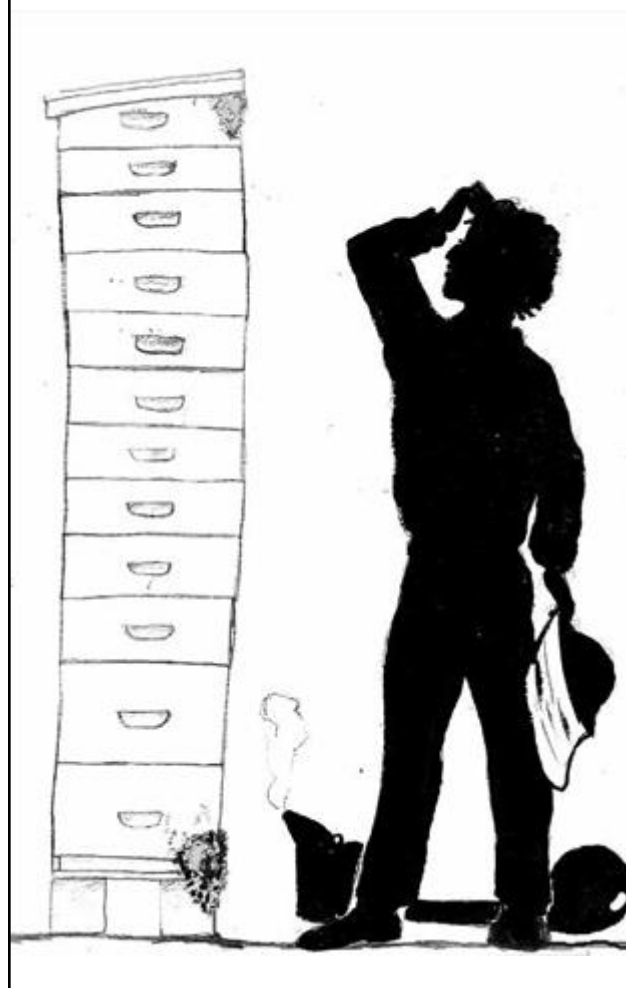
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Microscope Class Descriptions

(For Both Short Course and Conference)

Seating is limited for these classes. Interested students should contact Don Coats) doncoats@verizon.net as early as possible in order to help our planning and provide the most service out of this labor-intensive project. We will post updated schedule information outside the lab room, Merion 208. Students are invited to bring their own samples of bees, (preserved in Vodka or 70% isopropyl), healthy or suspect, and of pollen from any source that they would like to assess.

M101 Introduction to Microscopes

For students with little or no experience with microscopes, this class reviews basic parts and technique with the compound and stereoscope. With simple maintenance and respectable handling, an average microscope will perform well for 50 years or more. Focusing and protecting the slide are fundamental skills, but students are often unaware of options of illumination systems for different types/thicknesses of subjects.

M201 Microscopes and the Beekeeper

This class is a step up from Microscopy 101. Using pollen samples as the study subject, **Don Coats** will discuss magnification levels, light source effects, stains, mounting processes, and digital camera options that are available to the inquiring mind of the more advanced beekeeper.

M205 Worker Anatomy, Focus Tracheal Mites

Students will appreciate **Diana Sammataro's** strong background in honey bee anatomy with a specific focus on tracheal mites. In theory, as beekeepers strive to avoid pesticides, tracheal mites could become more common again. Tracheal tubes are easy to find with the dissecting scope and as no system is an island, other organs depend on their connections. So finding the tubes will direct the student to relationships between other anatomy and concepts of "breathing" without lungs or gills. We will also use archived microscope slides for this class.

M209 American Foulbrood Identification, in the Hive and under the Scope

Bart Smith, from the diagnostic lab at the USDA Bee Lab in Beltsville, MD, will discuss American foulbrood (AFB) and show how to identify the disease from gross symptoms in the comb. Additionally, students will learn how to prepare slides and identify *Paenibacillus larvae* spores, the causative organism of AFB, under the compound microscope.

M222 Detecting *Nosema* Infection in Honey Bees

Explore dissection of the honey bee digestive tract with Holly Holt and learn how to identify abnormalities that might relate to signs of *Nosema* infection. Learn about *Nosema* biology and pathology in the honey bee, how to identify *Nosema* spores with a compound microscope, and how to quantify infection levels. Samples will be provided, but attendees are encouraged to bring 20-50 foragers from their own hives to screen for *Nosema* infection (each hive sample should be stored separately). To collect foragers, block the entrance of your hive and place returning bees (with pollen pellets attached to their legs) in a jar of 70% isopropyl alcohol. Alternatively, older bees may be collected from the outer frames or inner cover lids of your hive.

M225 Sticky Board Assessment: Don Coats

There is much more than *Varroa* assessment that can be revealed in a three-day standard drop period. Wax moth frass and other pests can be diagnosed and assessed without opening the hive. Also read the bee activity signs, wax plates, wax discards from old comb, mold from excessive moisture, pollen ID and possible diarrhea. Simple methods of magnification tools will be discussed.

M230 Drone & Queen Reproduction Anatomy: Debbie Delaney

Drones and queens will be dissected with consideration of artificial insemination. Depending on your fine motor skills, you should find what avulses from the drone during that mid-air mating. Your teacher's monitor and other visual aids will show the subjects that we seek. You are promised to see stored sperm in seminal vesicle of a drone and spermatheca of the queen.

M240 Bee Plants & Their Pollen Identification: Diana Samatarro, Don Coats, Paul Arnold's Power Point

Finding pollen in bee feces, pollen baskets, honey, and the bloom is fascinating and easily done by the amateur at 40X to 1000X. A limited number of plant species or types can be readily distinguished from the masses; but many look like footballs or spheres with grooves and bumps on them. We will review a primer of terms, methods of collection (without processing), with and without staining, and options for light source.



You are invited to the Pennsylvania State Beekeepers' Association Annual Picnic

Saturday August 10th from 9 to 5 at the Morris Arboretum
Hosted by the Montgomery County Beekeepers' Association

The Morris Arboretum is the official arboretum of the Commonwealth of Pennsylvania. Don't miss this chance to view one of the most spectacular arboreta in the state.

Guided tours will include: The Big Bug Exhibit, The Garden Railway, The Tree Adventure, and Many Incredible Tree Specimens. Visit www.upenn.edu/arboretum for more information.

The Picnic is being held at Bloomfield Farm, located directly across the street from the arboretum. This area is not open to the public, but picnic attendees will be able to view the many attractions located here. They include: a large apiary, a bee garden enhanced by plantings by the Montgomery County 4-H Beekeeping Club, the official Langstroth Bench with the history of Langstroth carved on the panels, and the arboretum's Langstroth library. You will also be able to tour a restored and working mill and the LEED® Platinum Certified Horticulture Center.

Other planned activities include: an urban hive tour and mead tasting hosted by the Philadelphia Beekeepers Guild, a smoker lighting contest, hive openings, a report by the Pennsylvania State Honey Queen, and T-shirt and raffle ticket sales.

Sign up for the picnic and tours at the registration desk.

Directions from West Chester:

- 202 North 15.8 miles
- 76 West 1.1 miles
- PA Turnpike 276 East 10.7 miles
- Exit 333 Norristown
- Keep right at the fork, follow signs for Plymouth Meeting and merge onto Germantown Pike.
- Go 3.7 miles and turn left onto Northwestern Ave.
- Go 0.5 miles and enter through the gates to the Bloomfield Farm, on the left across the street from the public entrance to the Arboretum.

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Main
Conference Symposia
Conference Breakouts

Asplandh
Wednesday AM

Anderson
Computer Workshops

Beeyard

Allegheny
Movie Night

Tyson Hall
Dormitory

Queen Beeyard

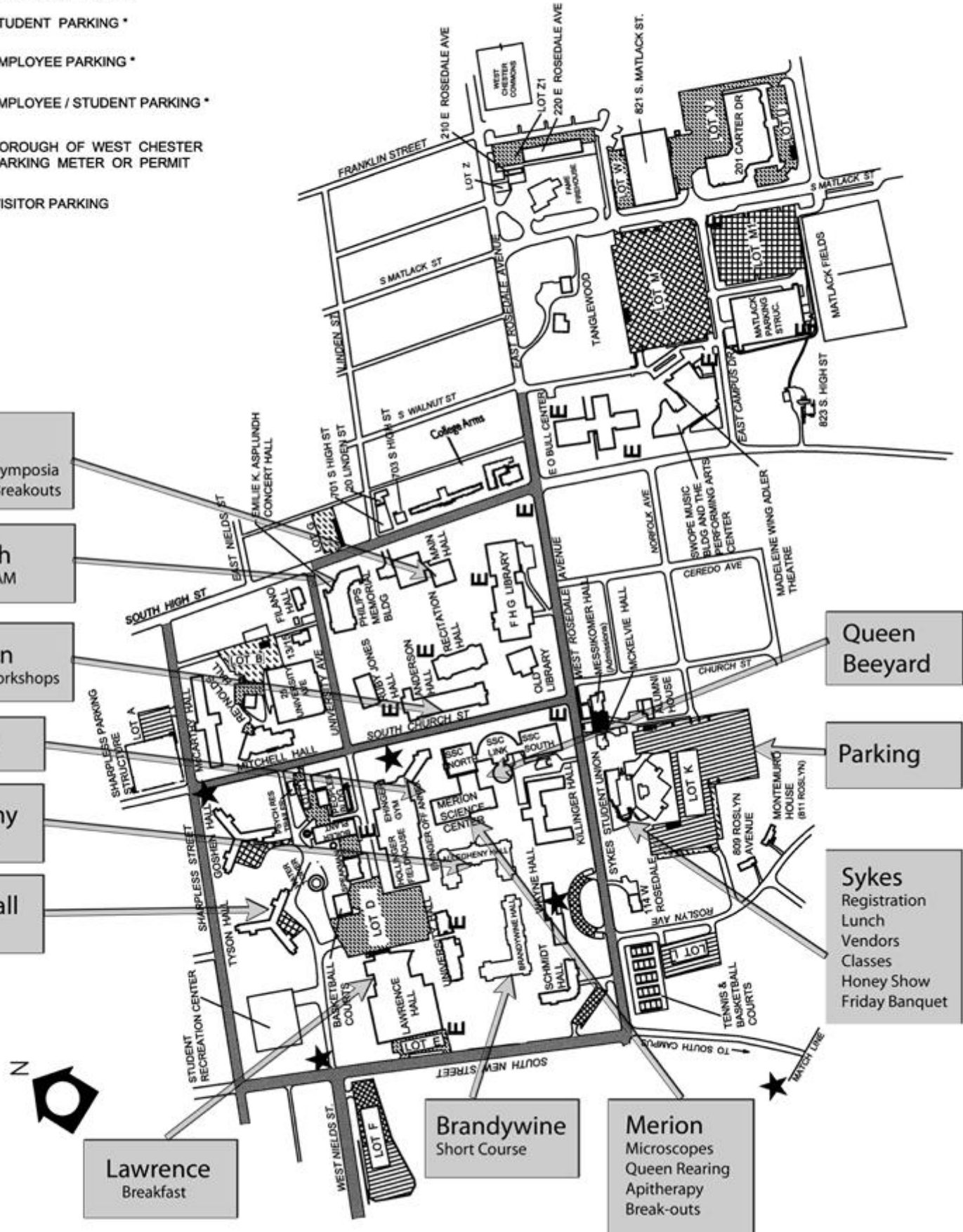
Parking

Sykes
Registration
Lunch
Vendors
Classes
Honey Show
Friday Banquet

Lawrence
Breakfast

Brandywine
Short Course

Merion
Microscopes
Queen Rearing
Apitherapy
Break-outs



Monday Morning Short Course Schedule

		Core Classes			Electives			
		Track 1	Track 2	Testing	Top-Bar Hives	Sideliner Topics	Value-Added Products	Microscopy
		Brandywine 31	Brandywine 33	Apiary	Brandywine 31	Brandywine 4	Merion 109	Merion 208
REGISTRATION	6:30–8:00	Breakfast for Dorm Residents (Lawrence)						
	8:00–8:45	SC111 * Biology of Individuals in the Hive Debbie Delaney	SC102 * Equipment & Construction Mark Antunes	SC151 * Drop In Q&A or Take the Core Field Exam	SC171 Top-Bar Hands-On Management Wyatt Mangum <i>(Limit 25-Preregistration Required)</i> <MEET IN APIARY>	SC301 Hobbyist/Sideliner Marketing Techniques Carleen Vorisek	SC221 Making Creams and Lip Balms with Beeswax Grace Crawford	M101 Introduction to Microscopes (& Pollen) Don Coats
	9:00–9:45	SC112 * Biology of the Colony Debbie Delaney	SC101 * Siting Hives, Good Neighbors, & BMP David Papke			SC302 Maximizing Honey Production Michael Palmer		M209 American Foulbrood Identification, in the Hive and under the Scope Bart Smith
	9:45–10:15	Break (Brandywine Foyer)						
	10:15–11:00	SC121 * Reading Hives & Frames Mark Antunes <MEET IN APIARY>	SC111 * Biology of Individuals in the Hive Debbie Delaney	SC151 * Drop In Q&A or Take the Core Field Exam	SC172 Top-Bar Seasonal Management, Other Topics Wyatt Mangum <MEET IN CLASSROOM>	SC303 Considerations for Honey Houses and Extraction Rooms Dennis Keeney	SC222 Making Creamed Honey Vince Aloyo	M209 American Foulbrood Identification, in the Hive and under the Scope Bart Smith
	11:15–Noon	SC124 * Management through the Seasons Stephan Repasky <MEET IN APIARY>	SC112 * Biology of the Colony Debbie Delaney			SC304 Building a Profitable Bee Business Dan Conlon		SC223 Mead Making 101 Bob Talkiewicz
	Noon–1:30	Lunch (at Sykes)						

* Of special interest to new beekeepers.

Monday Afternoon Short Course Schedule

		Core Classes			Electives			
		Track 1	Track 2	Testing	Top-Bar Hives	A Detailed Look at Bees & Pests	Queen Rearing	Microscopy
		Brandywine 31	Brandywine 33	Apiary	Apiary	Brandywine 4	Merion 109	Merion 208
REGISTRATION	1:30–2:15	SC142 * Diseases Part 1—Infections Brood Diseases Vince Aloyo	SC121 * Reading Hives & Frames Mark Antunes <MEET IN APIARY>	SC151 * Drop In Q&A or Take the Core Field Exam	SC171 Top-Bar Hands-On Management Matthew Feldman <i>(Limit 25-Preregistration Required)</i> <MEET IN APIARY>	SC305 Nucs Are My Business Mike Palmer	SC201 Bee Biology for Queen Rearing Elina L. Niño & Bernardo Niño	M101 Introduction to Microscopes Don Coats
	2:30–3:15	SC143 * Diseases Part 2—Parasites and Adult Bee Diseases Vince Aloyo	SC124 * Management through the Seasons Stephen Repasky <MEET IN APIARY>			SC341 What We Know about Varroa Mites Diana Sammataro	SC202 Equipment and Setup for Queen Rearing Elina L. Niño & Bernardo Niño <MEET IN APIARY>	
	3:15–3:45	Break (Brandywine Foyer)						
	3:45–4:30	SC132 * Products of the Hive David Papke	SC123 * Nucs, Splitting Hives, & Combining Hives Mark Antunes <MEET IN APIARY>	SC151 * Drop In Q&A or Take the Core Field Exam	SC199 Travel through Bee (and American) History: A Visit to a Local Beeyard and Apiary Museum Warren Graham <i>(Pick up map at registration and drive 20 minutes to site.)</i>	SC342 Small Hive Beetle Biology and Control Debbie Delaney	SC203 Grafting Elina L. Niño & Bernardo Niño	
	4:45–5:30	SC122 * Hive That Swarm Stephen Repasky <MEET IN APIARY>				SC309 Top Five Things to Be Successful in Beekeeping Panel Discussion Mike Palmer & Dennis Keeney	SC203 Grafting Elina L. Niño & Bernardo Niño	
	5:30–7:30	Dinner (On Your Own)						
7:30–8:30	Q&A with the Core Level Instructors *	Q&A with the Elective Instructors	Movie Night (Allegheny Theater) Possibly multiple movies at different theaters.					

Tuesday Morning Short Course Schedule

Core Classes			Electives					
Track 1	Track 2	Testing	Green Bees, Healthy Bees	A Detailed Look at Bees and Maladies	Train the Trainer <i>(Preregistration Required)</i>	Value-Added Products	Microscopy	
Brandywine 31	Brandywine 33	Apiary	Sykes Theater	Brandywine 4	Brandywine 10	Merion 109	Merion 208	
6:30–8:00 Breakfast for Dorm Residents (Lawrence)								
REGISTRATION	8:00–8:45	SC102 * Equipment & Construction Mark Antunes	SC141 * Noninfectious Disorders in the Hive Jim Bobb	SC151 * Drop In Q&A or Take the Core Field Exam	SC181 Overview and History of Organic, Natural, & Biodynamic Beekeeping Ben Bower	SC343 Understanding Nosema Holly Holt	SC401 Train the Trainer All Day Event Bill Mares & David Tarpy	SC231 Handmade Soaps Using Honey & Bees Wax Part I Landi Simone
	9:00–9:45	SC101 * Siting Hives, Good Neighbors, & BMP David Papke	SC131 * Feeding Bees Vince Aloyo	SC182 Natural Beekeeping & Certified Naturally Grown Buddy Marterre	SC320 Requeening Considerations Wyatt Mangum	SC232 Handmade Soaps Using Honey & Bees Wax Part II; Plus Collecting and Using Propolis Landi Simone	M222 Detecting Nosema Infection in Honey Bees Holly Holt (LIMIT 20)	
	9:45–10:15	Break (Brandywine Foyer)						
10:15–11:00	SC133 * Honey Processing David Papke	SC142 * Diseases Part 1—Infections Brood Diseases Vince Aloyo	SC151 * Drop In Q&A or Take the Core Field Exam	SC183 Easy Queen Rearing Techniques (w/out Grafting) Warren Graham <MEET IN APIARY>	SC322 How Bees Communicate Maryann Frazier	SC401 Train the Trainer All Day Event (Continued)	M222 Detecting Nosema Infection in Honey Bees Holly Holt (LIMIT 20)	
11:15–Noon	SC141 * Noninfectious Disorders in the Hive Jim Bobb	SC143 * Diseases Part 2—Parasites and Adult Bee Diseases Vince Aloyo	SC184 Queens: Local, Russian, Italian, Carniolan, Hygienic... Which Should I Choose? Dan Conlon	SC323 A Unique Communication Study: House Hunting Tom Seeley	SC235 Building a Bear-Proof Fence Landi Simone			
Noon–1:30	Lunch (Sykes)							

* Of special interest to new beekeepers.

Tuesday Afternoon Short Course Schedule

		Core Classes			Electives					
		Track 1	Track 2	Testing	Green Solutions for Varroa Control	Queen Rearing Followup	A Detailed Look at Bees	Train the Trainer <i>(Preregistration Required)</i>	Microscopy	
		Brandywine 33	Brandywine 31	Apiary	Sykes Theater	Merion 109	Brandywine 4	Brandywine 10	Merion 208	
REGISTRATION	HONEY SHOW DROPOFF	1:30–2:15	SC123 * Nucs, Splitting Hives, & Combining Hives Mark Antunes <MEET IN APIARY>	SC133 * Honey Processing David Papke <MEET IN BRANDYWINE 33c>	SC151 * Drop In Q&A or Take the Core Field Exam	SC191 Why Treat for Varroa— Pros & Cons Buddy Marterre		SC322 How Bees See	SC401 Train the Trainer All Day Event (Continued)	
		2:30–3:15	SC131 * Feeding Bees Vince Aloyo	SC132 * Products of the Hive Steve Repasky		SC192 Three Steps to Healthier Bees: Natural Size Cells, Proper Nutrition, and Local Genetics Adam Schreiber	SC204 Check the Queen Cells Elina L. Niño & Bernardo Niño <MEET IN APIARY>	SC306 Considerations When Expanding the Number of Hives Zac Browning		
		3:15–3:45	Break (Brandywine Foyer)							
		3:45–4:30	SC152 * Core Certificate Test			SC193 Varroa Control by Breaking the Brood Cycle Steve Repasky		Cooking with Honey WCU Staff	SC401 Train the Trainer All Day Event (Continued)	
		4:45–5:30	Bee Olympics (Academic Quad)							
		5:30–7:00	Dinner (On Your Own)							
		7:00–7:30	Honey Ice Cream Social (Sykes Theater Foyer)							
		7:30–8:30	Certificate Ceremony (Sykes Theater) Dewey Caron , EAS Chairman Emeritus & EAS Master Beekeeper Advisor, Keynote Speaker							

* Of special interest to new beekeepers.

EAS Board of Directors' Meeting
8:30–10:30 p.m. (Brandywine 4)

Wednesday Morning Conference & Short Course Schedule

		Plenary Symposium		
		Asplundh Concert Hall		
REGISTRATION		6:30–8:00	Breakfast for Dorm Residents (Lawrence)	
		8:00–8:30	Welcome Jim Bobb , <i>EAS Chairman</i> Maryann Frazier , <i>Conference Coordinator</i> Linda Betlejeski , <i>EAS President</i> TBA , <i>WCU Representative</i> Vincent Aloyo , <i>PSBA Vice President</i> George Greig , <i>PA Secretary of Agriculture</i>	
		8:30–9:15	What's the Buzz? Sustainable Foodsheds of the Past, Present, and Future Brian Snyder , <i>Association for Sustainable Agriculture Executive Director</i>	
		9:15–10:00	Dialogue in Bee Time: Lessons Learned from the Bees Mark Winston , <i>PA Professor and Author, Simon Fraser University</i>	
		10:00–10:30	Break (Vendor Area)	
	VENDORS	HONEY SHOW DROPOFF	10:30–11:15	Cooperation and Conflict in Honey Bee Colonies Christina Grozinger , <i>James I. Hambleton Award Winner and Professor Penn State University</i>
			11:15–Noon	What is Common and Unique to Beekeeping in NC Don Hopkins , <i>Roger A. Morse Outstanding Teaching/Extension Service/Regulatory Award Supported by Anita Weiss Foundation & Apiculturist, NC</i>
			Noon–1:30	Lunch (Sykes) <div style="float: right; text-align: right;"> Lifetime Members' Luncheon Mark Winston, Keynote Speaker (Sykes 115) </div>

Wednesday Afternoon Conference & Short Course Schedule

		Symposia		
		Making Peace & Places for Bees	Honey Bee Biology: A Deeper Understanding	
		Sykes Theater	Main Hall Auditorium	
REGISTRATION VENDORS	HONEY SHOW DROPOFF	1:30–2:00	The Value of Good Forage in Keeping Healthy Bees Zac Browning , <i>Commercial Beekeeper</i>	How Honey Bees Live in the Wild Tom Seeley , <i>Professor and Author, Cornell University & Carter Loftus</i>
		2:00–2:30	Conserving Bees in Managed Landscapes Doug Tallamy , <i>Professor and Author, University of Delaware</i>	Bee Brain Gas: How Nitric Oxide Helps Form Odor Memories Jay Hosler , <i>Assistant Professor/Cartoonist, Juniata College</i>
		2:30–3:00	Honey Corridors in the Appalachians Tammy Horn , <i>Faculty and Author, Eastern Kentucky University</i>	Colony Usurption: Out with YOUR Queen, In with THEIRS Wyatt Mangum , <i>Scientist and Author, University of Mary Washington</i>
		3:00–3:30	Apiary Services: Supporting Honeybees and Beekeepers Chris Harp , <i>Beekeeper, HoneybeeLives</i>	Nutritional Regulation of Division of Labor and Honey Bee Health Miguel Corona , <i>Scientist, USDA</i>
		3:30–4:00	Break	
		4:00–5:00	Breakouts (See Below)	
	5:00–5:30	Interactive Brainstorming: Making Peace & Places for Bees Zac Browning, Tammy Horn, Chris Harp, & Doug Tallamy	Interactive Brainstorming: Honey Bee Biology Tom Seeley, Jay Hosler, Wyatt Mangum, & Miguel Corona	
	5:30–9:00	Wednesday Night Social at Brandywine Picnic Park (Ticket Required)		

Well Bee-ing; Your Move

Kids & Bees



Join us Wednesday night, 7:00-8:30, for a free event. Adults are invited to attend **Well Bee-ing; Your Move**, a program and conversation hosted by the Eastern Apiculture Society with Brian Snyder, Executive Director of the PA Association for Sustainable Agriculture; Doug Tallamy, Professor and author of *Bring Nature Home*; and Dennis vanEngelsdorp, world renown honey bee expert.

Youth are invited to a **Kids & Bees** program, held at the same time and, hosted by the American and Pennsylvania Honey Queens and Princesses, in the Sykes Lounge area.

Breakouts (4:00–5:00)

Topic	Location
In Search of Perfect Bee Pasture: Where Can We Go These Days? Jeff Pettis & Zac Browning	Sykes Theater
The Communication Signals in Honey Bee Swarms Tom Seeley	Main Hall Auditorium
M225 Sticky Board Assessment Don Coats	Merion 208
Cooking with Honey	Sykes 10A
In the Apiary: Tammy Horn & Mike Palmer	Apiary
New Beekeeper Q&A in the Apiary Bee Wranglers	Apiary
Master Beekeeper Exam Preview Dewey Caron	Sykes 252

Thursday Morning Conference Schedule

		Symposia				
		Building Better Bees	A Forager's Challenge	Microcosopy	Apitherapy	
		Sykes Theater	Main Hall Auditorium	Merion 208	Merion 113	
REGISTRATION	VENDORS	6:30–8:00	Breakfast for Dorm Residents (Lawrence)			
		8:00–8:30	Tech-Transfer Teams: Working for Beekeepers Katie Lee , <i>Tech Team; Bee Informed Partnership</i>	Worldwide Pollinator Declines; Beyond CCD Jeff Pettis , USDA-ARS Research Leader	M101 Introduction to Microscopes (& Pollen) Don Coats	Apitherapy Overview and Beekeeping Frederique Keller L. Ac. , President AAS, Craig Byer , Board Member AAS
	HONEY SHOW JUDGING	8:30–9:00	High and Low Tech Solutions to Building Better Bees in Canada Rob Currie , Professor, University of Manitoba	A Bee's Hazard Statement: Caution! Pollen May Be Dangerous to your Health! Diana Cox-Foster , Professor, Penn State Univ	M209 American Foul Brood, in the Hive and under the Scope Bart Smith	Pollen and Bee Bread Frederique Keller L. Ac. , President AAS, Craig Byer , Board Member AAS
		9:00–9:30	Factors in Failing Queen Health Jeff Pettis , USDA-ARS Research Leader	Food Resources: Safe Sex in Plants Andy Stephenson , Professor, Penn State Univ		Propolis: Collection, Preparations, and Indications Frederique Keller L. Ac. , President AAS, Craig Byer , Board Member AAS
		9:30–10:00	Break (Vendor Area)			
		10:00–11:00	Breakouts (See Below)			
		11:15–Noon	Interactive Brainstorming: Building Better Bees Katie Lee, Rob Currie, & Jeff Pettis	Interactive Brainstorming: The Foragers' Challenges Diana Cox-Foster, Andy Stephenson, & Jim Frazier		Bee Venom Therapy; Applications & Technique (Informed Consent Form for people participating in afternoon Bee Venom Workshop) Frederique Keller L. Ac. , President AAS, Craig Byer , Board Member AAS
		Noon–1:30	Lunch (Sykes)			

Breakouts (10:00–11:00)

Topic	Location
A Primer on Floral Anatomy & Pollination: Andy Stephenson	Main Hall Auditorium
Factors in Failing Queen Health: Jeff Pettis , <i>USDA-ARS Research Leader</i>	Sykes Theater
Making Candles Fit for the Pope: Martin Marklin, Marklin Candle Design	Sykes 10A
M205 Worker Anatomy, Focus Tracheal Mites: Diana Sammataro	Merion 208
Bee Venom Therapy; Applications & Technique: Frederique Keller & Craig Byer, AAS	Merion 113
In the Apiary: Rob Currie & Katie Lee	Apiary
New Beekeeper Q&A in the Apiary: Bee Wranglers	Apiary
Hive Assessments: Dennis Keeney	Apiary

Thursday Afternoon Conference Schedule

		Symposia				
		Building Better Local Bee Populations	Innovative Outreach & Partnerships	Apitherapy		
		Sykes Theater	Main Hall Auditorium	Merion 113		
REGISTRATION	VENDORS	1:30–2:00	How to Build Better Local Bee Populations Dave Tarpy , <i>Associate Professor and Extension Apiculturist, University of North Carolina</i>	Bee Informed. Survey Says: Beekeeping Management Practices That Work and That Don't. Dennis vanEngelsdorp , <i>Assistant Research Scientist, University of Maryland</i>	Bee Venom Therapy Practical Demonstration Frederique Keller L. Ac., President AAS Craig Byer, Board Member AAS	
		2:00–2:30	Thinking Beyond Your Apiary; Tools and Strategies for Improving the Neighborhood Mike Palmer , <i>Beekeeper & Queen Breeder, VT</i>	The COLOSS Network: A Global Approach to Improve Bee Health Vincent Dietemann , <i>Senior Research Scientist, Swiss Research Center</i>		
		2:30–3:00	Dan O'Hanlon , <i>Beekeeper, Queen Breeder & Judge, WV</i> Dennis Keeney , <i>Beekeeper & Queen Breeder, PA</i> Troy Hall , <i>Beekeeper & Queen Breeder, NH</i>	Bee Partners in Kenya & USA—Using Solar Wax Melter/Beeswax Exchange as a Starting Point Elliud Muli , <i>Faculty; South East University and Beekeeping Specialist, Icipe, Kenya</i>		
		3:00–3:30	Break (Vendor Area)			
		3:30–4:30	Breakouts (See Below)			The Colors of Propolis & Salve-making Workshop Frederique Keller L. Ac., President AAS Craig Byer, Board Member AAS
		4:45–5:30	Interactive Brainstorming: Queen Production Dave Tarpy, Mike Palmer, Dan O'Hanlon, Dennis Keeney, Troy Hall	Interactive Brainstorming: Innovative Outreach & Partnerships Elliud Muli, Vincent Dietemann, & Dennis vanEngelsdorp		
		6:30–9:30	Thursday Night Social, Live Auction, and Honey Show Award Ceremony (Ticket Required) Red Clay Room, 423 Dalmation Street, Kennett Square, PA 19438			

Travel through Bee & American History

At 3:30, visit a Local Bee-yard and Apiary Museum with Warren Graham. (Pick up map at registration and drive 20 minutes to site.)

Breakouts (3:30–4:30)

Topic	Location
Blueprints for Building Better Local Bee Populations: Dave Tarpy, Mike Palmer, Dan O'Hanlon, Dennis Keeney, Troy Hall	Sykes Theater
M205 Worker Anatomy, Focus Tracheal Mites: Diana Sammataro	Merion 208
The Colors of Propolis & Salve-making Workshop: Frederique Keller L. Ac., AAS & Craig Byer, AAS	Merion 113
Bee Lining in the Apiary: Tom Seeley	Apiary
Bee Partners; Kenyan and US Beekeepers: Elliud Muli, & Maryann Frazier	Main Hall Auditorium
New Beekeeper Q&A in the Apiary: Bee Wranglers	Apiary
Mead-making 101: Bob Talkiewicz	Sykes 10A

Travel through Bee (and American) History

A Visit to a Local Beeyard and Apiary Museum at Colonial Pennsylvania Plantation

As the American Revolution (1776) cut off imports of molasses to the Colonies, beekeeping efforts surged.

The Colonial Pennsylvania Plantation's Bee Craft displays imagine the efforts of a small farm apiary circa 1776. Three generations before Langstroth's modern hive debuted in Philadelphia (1852), American beekeepers were innovating with straw skeps, bee gums (hollow logs), and early trough hives. Walk back into the 18th century and imagine with us the earliest days of American Beekeeping! Warren Graham, third generation beekeeper, will lead us through history of our young nation, highlighting the importance of honey and sweeteners to the shaping our country.



Two tours are available while attending EAS West Chester: Monday, August 5 at 3:45 p.m. and Thursday, August 8 at 3:30 p.m.

Pick up a map at registration and drive the 10 miles/20 minutes to the site. Colonial Pennsylvania Plantation is located at Ridley Creek State Park, Media, PA. Admission and parking is free with your EAS name tag.

Pictures and more information on the Colonial Pennsylvania Plantation can be found on the web at www.colonialplantation.org.

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I emailed her yesterday and called her today, but have not reached her. Does anyone know Bobbie?—Penelope

Friday Morning Conference Schedule

		Symposia			
		New Tools to Address New & Old Problems	Beekeeping Around the World		
		Sykes Theater	Main Hall Auditorium		
REGISTRATION		6:30–8:00 Breakfast for Dorm Residents (Lawrence)			
		8:00–8:30	Modeling as a Tool for Assessing Honey Bee Colony Health Jim Frazier, Professor, Penn State University	Challenges Facing Beekeepers in the UK Helen Thompson	
	VENDORS	HONEY SHOW	8:30–9:00	What Can Genomics Teach Us about Honey Bee Health? Christina Grozinger, Associate Professor, Penn State University	Traditional Beekeeping in Kenya: a Contributing Factor to Bee Health? Elliud Muli
			9:00–9:30	Recent Advances in Bee Risk Assessment in the EU Helen Thompson	Keeping Bees Healthy in Europe Vincent Dietemann
			9:30–10:00 Break (Vendor Area)		
			10:00–10:30	A New Way of Looking at “Old” and “New” Mites Diana Sammataro, Scientist, USDA	Can We Manage Problems Causing Colony Losses in Canada? Rob Currie
			10:30–11:00	Honey Bee Microbiota: Maybe it’s the Little Things that Matter Paul Niemczura	Coping with Africanized Bees & Bee Mites in South and Central America Dewey Caron
			11:00–11:30	Invitation to EAS Kentucky, Tammy Horn, EAS 2014 President	
			11:30–Noon	EAS Annual Business Meeting	
			11:30–Noon	Lunch (Sykes)	
	11:30–Noon	Lunch (Sykes)			
	Noon–1:00	Lunch (Sykes)			

EAS Annual Business Meeting
11:00-Noon (Sykes Theater)

Friday Afternoon Conference Schedule

Workshops									
	Honey Bees & Computers	Honey Bees in Culture	How To: Bees	How To: Products	Microscopy	Team Work	Apiary Work	Queen Rearing	
	Anderson 001	Sykes 252	Merion 113	Sykes 10A	Merion 208	Merion 112	Apiary	Merion 109	
HONEY SHOW	1:00–1:45	A Decision Support System for Honey Bee Colony Management Bruce Miller, Rule of Thumb Inc.	Writing About Bees: An Interactive, Hands-on Breakout Mark Winston	Reading the Hive—Do We Always Need to Open? Dewey Caron		M201 Microscopes and the Beekeeper Don Coats	Gamma Irradiation Brian Marcy & Mark Antunes	Working with African Bees Elliud Muli	Practical Queen Rearing Techniques Elina L. Niño & Bernardo Niño (Limited to 20)
	2:00–2:45	Drop-in Computer Time on Decision Support System Bruce Miller	Drawing on the Hive: How to Draw Comic Stories about Bees and Insects Jay Hosler	Performing Hive Assessments Katie Lee	Mead Making 101 Bob Talkiewicz	M230 Drone & Queen Reproduction Anatomy Deb Delaney	Let's Do It Together Grai St. Clair Rice & Chris Harp	Assessing Varroa Populations Bee Wranglers	
	2:45–3:15	Break (Honey Show Area in Sykes)							
	3:15–4:00	A Decision Support System for Honey Bee Colony Management Bruce Miller	Beeconomy: What Women and Bees Teach Us about Local Trade and Global Markets Tammy Horn	Managing Risk in Honey Production: From the Hive to the Pantry Deb Delaney	Making Comb Honey Herman Danenhower	M240 Bee Plants & Their Pollen Identification Diana Sammataro	Marketing for Small Scale/Sideline Beekeepers Charlie Vorisek	Hive Assessments Katie Lee	Practical Queen Rearing Techniques Elina L. Niño & Bernardo Niño (Limited to 20)
	4:15–5:30	Drop-in Computer Time on Decision Support System Bruce Miller	Master Beekeeper Exam Review Dewey Caron	Top-Bar Hive Beekeeping: Financially Sustainable Wyatt Mangum	Candle-Making ... Fit for the Pope Martin Marklin	M205 Worker Anatomy, Focus Tracheal Mites Diana Sammataro	Bee Partners; Kenyan and U.S. Beekeepers Elliud Muli & Maryann Frazier	Identification of Brood Diseases Bee Wranglers	
	6:00–6:30	Reception (Sykes)							
	6:30–9:00	Banquet (Sykes Ballroom)							

Master Beekeeper Exam Review
4:15–5:00 (Sykes 252)

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**7/10/2013. Jim--could you contact Mann Lake. Because they wanted an inside cover and those spots are already taken, I think if someone who knew them called, it would be nicer.
—Penelope**



Dear EAS attendees:

In Eastern Kentucky, when we are excited about the future, we say “we are fixing” to do something or go somewhere. I’ve always been partial to this vernacularism because it implies that we are people who are problem-solvers, who don’t “turn tail” from challenges, and who are resolved to see something to the end.

That said, Eastern Kentucky University is “fixing” to get ready for EAS 2014, and we couldn’t be more excited. Since next year will be the 100th anniversary of the Smith-Lever Act, which federalized the cooperative extension programs, the theme for 2014 will be “Bee Boots on the Ground.”

Author Christian Sprengel once said, “there should be standing armies of bees.” Kentucky has a rich military history, including agricultural development programs, and the program will reflect the need to promote a ready supply of beekeepers as well as bees.

Come hear Dr. Nicola Bradbear, founder of Bees for Rural Development, talk about programs in India and Africa.

Or duck into a talk about the KY National Guard Ag Development officers Jo Lisa Ashley or Lt. Benny Richardson to hear about beekeeping in Afghanistan.

Definitely schedule some time for a social bee tour to Shakertown or Berea College, or visit Lexington urban beekeeping facilities, a meadery in Bowling Green, the surface mine sites in Hazard, or a bee supply factory in Frankfort or Clarkson.

Above all, plan to enjoy the diverse ways in which cooperative extension has transformed our abilities to be beekeepers: locally, regionally, and internationally.

Respectfully,

Tammy Horn

Author of Beeconomy (2012) and Bees in America (2005)

EAS Kentucky

July 28-August 1, 2014

**Eastern Kentucky University
Richmond, Kentucky**

**Stay for KSBA meeting on:
Saturday, August 2, 2014**

IBC<AHPA ad>

2014 North American Beekeeping Conference & Tradeshow

BEEES On the BAYOU



January 7-11, 2014

The Baton Rouge River Center
Baton Rouge, Louisiana

The city of Baton Rouge welcomes the ABF for the 2014 North American Beekeeping Conference & Tradeshow. The conference will be held at the Baton Rouge River Center with guest room accommodations available at the Belle of Baton Rouge and the Hilton Baton Rouge Capital Center.

Baton Rouge is one of the fastest-growing cities in America. With so much to see and do, you'll want to start planning your agenda now. There is never a dull moment in Baton Rouge!

The River Center is centrally located in the downtown area, within walking distance of various attractions, cultural sites, hotels, restaurants and nightlife. With surroundings rich in Louisiana culture and entertainment, the River Center provides a unique environment for memorable experiences, including the 2014 ABF annual conference.

The Belle of Baton Rouge, the conference host hotel, is located just steps away from the Baton Rouge River Center. This hotel features 278 guest rooms, complimentary high-speed Internet access, complimentary airport shuttle, heated outdoor pool and a fully equipped health facility.

The 2014 North American Beekeeping Conference & Tradeshow is sure to offer top-notch education sessions from industry leaders, various networking opportunities, a variety of hands-on workshops and lots of fun.

Watch for details on the ABF conference website at
www.nabeekeepingconference.com



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