



Oregon State Beekeepers Association ***2016 Fall Conference***

October 28–30, 2016

Oregon Garden & Resort | Silverton, Oregon



Conference Program



Conference Exhibitors, Advertisers, and Events

Exhibitors

American National Insurance
Bee Certain
Bee Informed Partnership
Beeline Apiaries & Woodenware
FieldWatch, Inc
GloryBee (ad, page 14)
Linn Benton Tractor (ad, page 18)
Mann Lake (ad, page 8)
Oregon Department of Agriculture
 Legislation and Hive Registration
 Plant Conservation
Pacific Risk Management (ad, page 20)
Ruhl Bee Supply (ad, page 16)
Shastina Millwork (ad, page 6)
Shonnard's Nursery
Southpaw Bees & MFG

Tree Hive Bees
True Wood Products
Western Bee Supply

Additional Advertisers

Barkman Honey (page 12)
Dadant & Sons (page 10)
Heitkams' Honey Bees (page 16)
Les Schwab (page 23)
Maxant (page 20)
Old Sol Apiaries (page 18)
Olivarez Honey Bees (page 8)
Pendell Apiaries (page 20)
Salem Pallet (page 18)
Skyline Ford (page 10)
The Weather Cafe (page 18)

In addition to visiting with vendors and others providing updates and information, be sure to stop by the mobile **Oregon State University Honey Bee Lab** in the OAN Room on Saturday and Sunday. You will have an opportunity to see how lab members Hannah Lucas and Ellen Leinhaupel analyze honey bee samples for Nosema, do Varroa mite counts, and dissect bees for tracheal mites and hypopharyngeal glands. The OSU team can also tell you about current research projects and extension events. Honey bee samples dropped off for analysis will be completed within 1–2 weeks after the conference.

On Saturday, see the **Conference Honey Show**, where Judges Marjie Ehry and Scott Ingles will be evaluating Extracted Honey, Comb Honey, Beeswax Articles/Candles, Cosmetics, Educational Displays and/or Pictures, Honey Gift Packages, and Gadgets.

You might also check out the **Silent Auction**, managed by Marjie Ehry with Suzannah Kruse assisting, during the day on Saturday and the **Benefit Auction**, managed by the OSU Honey Bee Lab, following the evening **Banquet**. Rounding out the days are **Luncheons** on both Saturday and Sunday.





© The Oregon Garden

Welcome!



The 2016 OSBA Fall Conference takes place on the lovely grounds of The Oregon Garden. Sessions and events are held in the J. Frank Schmidt Jr. Pavilion, the Education Building, and the Main Lodge at Oregon Garden Resort, as indicated on page 4. Information in this program includes:

	<i>Page</i>
Exhibitors, Advertisers, and Events	2
Session and Event Locations	4
Conference Agenda	5
Program Abstracts	7
Presenters and Others	17

In addition to learning from conference presenters and presentations, exhibitors, and one another, we'll have opportunities to:

- Visit during breaks over morning coffee/tea—and snacks later in the day
- Check out exhibitor items both inside the rooms of the Pavilion and outside
- Donate as well as bid on items in the silent and benefit auctions
- Get the latest from the Oregon Department of Agriculture
- Observe pest and disease analyses in the mobile OSU Honey Bee Lab
- View entries and see how they (including yours) rank in the Honey Show
- Visit during luncheons and the evening banquet
- Access Wi-Fi (OGR Events | password: resort2015) during breaks

Be sure to ask for additional information if you have any questions. Enjoy the conference!

Session and Event Locations

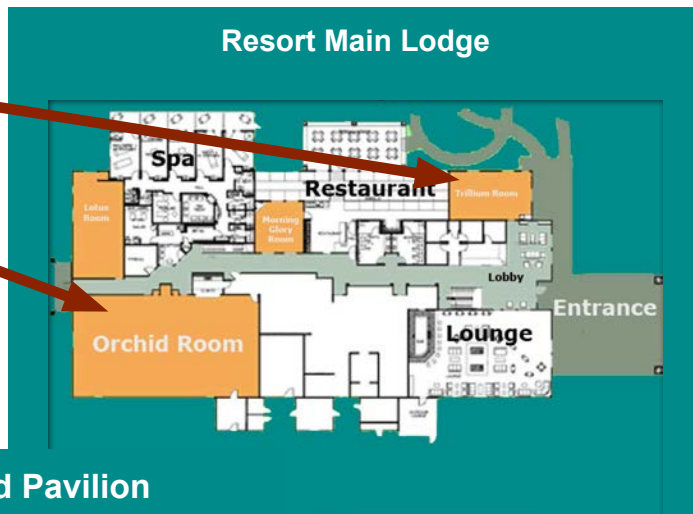
RESORT MAIN LODGE

Trillium Room

Friday Registration

Orchid Room

Friday Reception
Saturday Social Event
Banquet/Benefit Auction



Education Building and Pavilion



EDUCATION BUILDING

Bee School
Mead Workshop

PAVILION

Grand Hall

Saturday & Sunday Registration
General Sessions
Luncheons
Membership Meeting
Silent Auction
Breaks

OSU Room

OSU Honey Bee Lab
Honey Show
Exhibitors

OSU Room

Exhibitors

The Oregon Garden is an 80-acre botanical garden that features more than 20 specialty gardens showcasing the diverse botanical beauty of the Willamette Valley and throughout the Pacific Northwest. The Oregon Garden is also committed to sustainability. There's much to enjoy during the conference, and the tram is running. If you choose to visit the garden also during the conference, please note that other than service animals, pets are not allowed on the tram. In addition, among The Oregon Garden policies are: *Pets must be on leash at all times *No jogging or running in the Garden *The Garden is a smoke-free zone *For your own safety, please stay on garden paths and out of water features.

For additional information about The Oregon Garden, visit: www.oregongarden.org.

Conference Agenda



Friday, October 28

- 6:00 PM **Registration** (Trillium Room, Main Lodge)
7:00 PM **Kick-Off Wine and Cheese Social**
(Orchid Room, Main Lodge)

Saturday, October 29

- 7:30 AM **Registration** (Entry Hall, Pavilion)
8:00 AM **Silent Auction** Begins (Grand Hall, Pavilion)
8:15 AM **Welcome & Announcements** (Pavilion)
Harry Vanderpool, OSBA President

General Session (Pavilion)

- 8:30 AM **The Grand Interaction of Flowers, Bees,
Growers, and Beekeepers**
Dr. John Skinner, University of Tennessee

Concurrent Session (Education Building)

- 8:30 AM–
2:45 PM **Bee School**
Thom Trusewicz, Director
- 9:15 AM **Mite Keeping 101**
Morris Ostrofsky
- 9:45 AM **Deadline for Submitting Honey Show Entries**
(OAN Room, Pavilion)
- 10:00 AM **Break**
- 10:15 AM **What Makes a Queen Tick: Factors Affecting
Honey Bee Queen Post-Mating Changes**
Dr. Elina Niño, University of California-Davis
- 11:00 AM **Update from Bee Informed Pacific Northwest
Tech Transfer Team**
Ellen Topitzhofer, Oregon State University
- 11:30 AM **Update from Oregon Master Beekeeper Program**
Carolyn Breece, Oregon State University
- NOON **Luncheon** (Pavilion, Preregistration required)
Pollinator Protection in Oregon
Dr. Andony Melathopoulos, Oregon State University
Bob Walters, FieldWatch, Inc
- 1:15 PM **WSU Honey Bee Germplasm Importation and
Effects on US Commercial Populations**
Dr. Steve Sheppard, Washington State University
- 2:00 PM **Queen Rearing at Miksa Honey Farm**
David and Linda Miksa, Miksa Honey Farm
- 2:45 PM **Break**
- 3:00 PM **Following the Wild Bees: The Craft and Science
of Bee Hunting**
Dr. Tom Seeley, Cornell University
- 3:45 pm **Indoor Wintering Affects Varroa Mites and
Honey Bee Nutrition**
Dr. Brandon Hopkins, Washington State University

- 4:00 PM **Silent Auction** Ends
4:30–
5:45 PM **OSBA General Membership Meeting**
(Stage Area, Pavilion)

Evening Events (Orchid Room, Main Lodge)

- 6:00 PM **Social Hour**
7:00 PM **Banquet** (Preregistration required)
Getting a Few Things Off my Chest
George Hansen, Foothills Honey Company
Benefit Auction to Follow

Sunday, October 30

- 7:30 AM **Registration** (Entry Hall, Pavilion)
8:15 AM **Welcome & Announcements** (Pavilion)
Harry Vanderpool, OSBA President

General Session (Pavilion)

- 8:30 AM **The Bee Colony as a Honey Factory**
Dr. Tom Seeley, Cornell University

Concurrent Session (Education Building)

- 8:30–
10:00 AM **Mead Workshop**
Andrew Schwab, Instructor
- 9:15 AM **Ongoing Research on Mushrooms and Bees
at WSU**
Dr. Steve Sheppard, Washington State University
- 10:00 AM **Break**
- 10:15 AM **Sharing 65 Years of Beekeeping Experiences**
David and Linda Miksa, Miksa Honey Farm
- 11:00 AM **OSU Honey Bee Lab Research Update**
Dr. Ramesh Sagili, Oregon State University
- NOON **Luncheon** (Pavilion, Preregistration required)
Observations from the Field
Ellen Topitzhofer, Oregon State University
- 1:15 PM **Biomitocides for Varroa Mite Management**
Dr. Elina Niño, University of California-Davis
- 2:00 PM **How Project Apis m. Supports Bees, Growers,
and Beekeepers in Agriculture**
Billy Synk, Project Apis m.
- 2:45 PM **Break**
- 3:00 PM **Those Other Pollinators, Native Bees**
Dr. John Skinner, University of Tennessee
- 3:45 PM **Final Comments** (Pavilion)
Harry Vanderpool, OSBA President
- 4:00 PM **Adjourn**

Please turn in Evaluation Forms at Registration or Exit

THE REVOLUTION BOX

Any Size

Paint
Optional

SHASTINA MILLWORK

INNOVATIVE DESIGN

- * Ask about our unique GUARANTEE
- * Call for distribution points nearest you
- * Ponderosa Pine Products (kiln dried)

Any Quantity

1⁵/₈"

Top
Box
Joint

FREE
BRANDING

Now
Making
Frames

- * Superior Strength
- * Same box dimensions
- * Same frame rest dimensions

Assembly
Optional

877-789-7526 Toll Free
www.shastinamillwork.com

Program Abstracts

Friday, October 28

Registration (Trillium Room, Main Lodge)

6:00 PM

Kick-Off **Wine and Cheese Social** (Orchid Room, Main Lodge)

7:00 PM

Saturday, October 29

Registration (Entry Hall, Pavilion)

7:30 AM

Silent Auction Begins (Grand Hall, Pavilion)

8:00 AM

Welcome & Announcements (Pavilion)

8:15 AM

Harry Vanderpool, OSBA President

General Session (Pavilion)

The Grand Interaction of Flowers, Bees, Growers, and Beekeepers

8:30 AM

Dr. John Skinner, University of Tennessee

This presentation explains pollination as a mutualistic interaction where the pollinator receives food while visiting the flower and the plant reproduces. We will “think like bees” or “think like plants” to examine this interaction. Bees are the ideal pollinators having the morphology, physiology, and behavioral attributes to be successful foragers. The flower(s) provide advertisements in the form of visual, olfactory, and physical stimuli that the bee has the ability to respond to. Extending the Interaction further, beekeepers and growers must cooperate to understand their respective needs to successfully pollinate the crop and produce the fruit vegetable or seed that we need to survive.

Concurrent Session (Education Building)

Bee School

8:30 AM–2:45 PM

Thom Trusewicz, Director

This class covers history, anatomy, behavior of the honey bee. We will cover pollination and hive products and different methods and philosophies of hive management. This is a lecture slide show presentation and is open for questions as they come up.

Mite Keeping 101

9:15 AM

Morris Ostrofsky

We are all beekeepers. We also all keep mites. As the Honey Bee Coalition states, “We all need to accept the fact that we have an extra member of the family – the mite – and it’s here to stay.” We may understand bees well but now we need to do the same with regard to the Varroa mite. Without action on our part, beekeeping can quickly morph into mite keeping. Mites are in all of the hives; you’ll never get rid of them all. The question is, will the mite population take control turning you into a mite keeper rather than a bee keeper? This program presents tools you can use to keep you and your bees in control of your hives. The focus is a practical approach to managing Varroa mites over the course of the year. Recognizing mite indicators, how mites affect raising “fat” winter bees, and mite bombs are just a few of the discussion items. Morris will also share treatment strategies that have worked for him.

Deadline for Submitting **Honey Show Entries** (OAN Room, Pavilion)

9:45 AM

Break

10:00 AM

We accept all major credit cards



CONNECT WITH US!



PREMIUM QUALITY



QUEENS

AVAILABLE YEAR ROUND

HEALTHY = HEALTHY
QUEENS = HIVES



OLIVAREZ HONEY BEES

OHB has been raising queens for more than 50 years. We raise Italian, Carniolan and Saskatraz queens and bees in the heart of Northern California and on Hawaii's Big Island. These carefully chosen locations allow us to provide our bees with the purest environments and the best food sources, and to offer our customers premium quality queens and bees year round.



BIG ISLAND QUEENS

A division of Olivarez Honey Bees, Inc.

CALIFORNIA (530) 865-0298

HAWAII (808) 328-9249

TOLL FREE (877) 865-0298

OHHBEES.COM

No Matter What You Need...



HopGuard® II



MANN LAKE
WE KNOW BEES

800-880-7694

Free shipping applies to most orders over \$100 shipped standard ground delivery within the lower 48 states.

What Makes a Queen Tick: Factors Affecting Honey Bee Queen Post-Mating Changes

10:15 AM

Dr. Elina Niño, University of California-Davis

Mating is an intricate process that causes many changes on behavioral, physiological, and molecular levels in females of sexually reproducing species. Understanding insect reproduction is critical for both basic and applied research. Revealing factors and molecular mechanisms that regulate reproductive processes provides insights into regulation of insect reproduction which is crucial for breeding advancement of beneficial insects such as pollinators. Previous studies on honey bees suggest that insemination volume and seminal fluid components both play a role in triggering queen post-mating changes. However, the long-term effects of these factors have not been previously characterized. By manipulating the mating process, factors (e.g., seminal fluid components, seminal volume) that cause immediate behavioral changes and long-term physiological and molecular changes were examined in queens that reached their final reproductive state of high ovary activation. Results of these studies indicate that seminal volume stimulates ovary activation while seminal fluid components play a role in maintaining long-term physiological and transcriptional changes. Mating also causes changes in production of queen pheromones which are important for regulating the behavior and physiology of workers and therefore social organization within the colony. Current work is elucidating molecular evolution of seminal fluid proteins and their role in triggering specific post-mating changes.

Update Bee Informed Pacific Northwest Tech Transfer Team

11:00 AM

Ellen Topitzhofer, Oregon State University

For three years, the PNW Tech Transfer Team has worked with commercial beekeepers in Oregon, Idaho, and Washington with a primary focus to monitor colony health through quick and standardized sampling methods. Ellen will provide an update on the team's achievements, which include two years of pesticide analyses during almond bloom and change in management strategies for Varroa mite infestation.

Update from the Oregon Master Beekeeper Program

11:30 AM

Carolyn Breece, Oregon State University

The Oregon Master Beekeeper Program (www.oregonmasterbeekeeper.org) is a collaborative effort between OSU and OSBA. It began in 2012 and has now educated over 800 beginning beekeepers and 130 advanced beekeepers. The volunteers are the best part of the program: they provide essential hands-on training to new beekeepers and educate their communities about bees and beekeeping. We will share our results of a recent survey and provide a review of 2016 events.

Luncheon (Pavilion, Preregistration required) Pollinator Protection in Oregon

NOON

Dr. Andony Melathopoulos, Oregon State University

Pollinator decline is changing the way lawmakers and regulators think about pesticides, thus presenting a unique opportunity for the beekeeping industry to put lasting policy and educational structures in place to lower bee pesticide exposure. But what would these "structures" look like? If we think ambitiously, could we envision pollinator protection as being a part of people's daily work life (within the next five years)? Could pollinator protection become second nature; not just a best management practice, but a standard management practice? Three Oregon House Bills passed in 2015 have charged Oregon State University to develop these ambitious and lasting changes in the state. Andony will describe the (very) early stages of working with stakeholders to develop the state's pollinator health outreach and education plan. He will provide a preliminary plan to educate pesticide applicators and the public on best practices. He will also express the need for a framework that can relate exposure risk to patterns of colony movement through the landscape and make the case for how such a spatially explicit model of pesticide exposure for pollinators could be used to better target extension resources.

Bob Walters, FieldWatch, Inc

Bob will introduce the BeeCheck Apiary Registry, promoting communications between beekeepers and applicators to support ongoing stewardship activities.



HELPING YOU BUILD THE MID-VALLEY SINCE 1962

**SPECIAL PRICING
FOR BEE KEEPERS**



503-581-2411

2510 Commercial St. SE, Salem, OR 97302

Ask for: **Don Fredrickson**
Norm Messenger
Kelley Jones

DADANT & SONS

QUALITY — SERVICE — VALUE
Since 1863

Your one-stop shopping center for beekeeping supplies.

- Quality Pollen Supplements
- Woodenware — Hives
- Extracting Equipment
- Protective Clothing
- Bee Medications

15 C. Valley Ct. • Chico CA 95973 • 877-332-3268
3914 N. Winery Ave. • Fresno, CA 93725 • 877-432-3268

www.dadant.com



- Honey Containers
- Honey Handling Products
- Plastic Frames & Foundation
- Mite Treatments — Apiguard, Apivar, Mite Away and Oxalic Acid



- Smokers
- Hand Tools
- Beeswax Foundation
- Wine & Mead Making Accessories
- Books; American Bee Journal



WSU Honey Bee Germplasm Importation and Effects on US Commercial Populations**1:15 PM****Dr. Steve Sheppard**, Washington State University

This talk will cover the importation of honey bee germplasm from Old World sources, cryopreservation, and conservation of germplasm in a genetic repository and utilization. Of this material in both WSU bee breeding efforts and the commercial queen production industry, Steve will report evidence from a molecular genetic marker study that demonstrates the measurable impact of these importations on current US honey bee populations. He will also report establishment of a honey bee species committee within the USDA-National Animal Germplasm Program and the initial submissions of cryopreserved honey bee semen into the facility in 2016.

Queen Rearing at Miksa Honey Farm**2:00 PM****David and Linda Miksa**, Miksa Honey Farm

This session is a walk in David and Linda Miksa's shoes from the beginning of their queen-rearing season that started in June 2015 and ends November 2016. This past June, they began their 2017 season. Grafting for nine consecutive months a year racks up millions of cell cups of grafting experience. They have found that the main factors for success are Family, location, location, and location. They will share their methods and tools.

Break**2:45 PM****Following the Wild Bees: The Craft and Science of Bee Hunting****3:00 PM****Dr. Tom Seeley**, Cornell University

In this talk, we look at bee hunting—locating wild colonies of honey bees—which is one of the most fascinating games in the world. We will review the equipment involved and the process of establishing and following beelines, which are lines of bees flying back to their secret homes. This outdoor activity is one of infinite variety, of suspense, disappointment, perseverance, and triumph. You go out into the fields. Before you rises a hillside with ten thousand trees. One of those trees is a bee tree. With simple equipment, and special skills, you can find it! For this talk, Tom draws heavily on material described his latest book, *Following the Wild Bees: The Craft and Science of Bee Hunting*.

Indoor Wintering Affects Varroa Mites and Honey Bee Nutrition**3:45 PM****Dr. Brandon Hopkins**, Washington State University

Overwintering honey bee colonies in California “holding yards” can be a challenging place to keep colonies alive and healthy during the winter months. Beekeepers need a place to stage bees that are easy to access for transport to almond orchards at the start of the pollination season. An increasing number of commercial beekeepers are turning to indoor storage of their colonies in potatoes sheds, fruit storage warehouses, and purpose-built facilities to increase winter survival and still have access to move bees when needed. There remains little research on the effects different storage conditions have on honey bee health. We will present research on honey bee fat and protein levels after two months wintering indoors versus outdoors. In a separate experiment, we will present the findings on the effects high CO₂ levels have on Varroa mite mortality.

Silent Auction Ends**4:00 PM****OSBA General Membership Meeting** (Stage Area, Pavilion)**4:30–5:45 PM****Social Hour** (Orchid Room, Main Lodge)**6:00 PM****Banquet** (Orchid Room, Main Lodge, Preregistration required)**7:00 PM****Getting a Few Things Off My Chest****George Hansen**, Foothills Honey Company

George will outline some of the issues that he is involved with currently in industry activities. Integrated Pest Management, Best Management Practices (BMPs), New Varroa Controls, Tank Mixing Agricultural Chemicals, Seed Coatings, and Pesticide Warning Labels are on the menu.

Barkman Honey



Candace Moss

Honey Buyer

620-266-2934

cmoss@barkmanhoney.com



Sunday, October 30

Registration (Entry Hall, Pavilion)

7:30 AM

Welcome & Announcements (Pavilion)

8:15 AM

Harry Vanderpool, OSBA President

General Session (Pavilion)

The Bee Colony as a Honey Factory

8:30 AM

Dr. Tom Seeley, Cornell University

We will explore how a colony of honey bees operates as a factory that produces honey efficiently despite tremendous day-to-day swings in the supply of nectar, the raw material for making honey. An important feature of the organization of the honey production process is a division of labor between the nectar foragers, elderly workers who toil outside the hive collecting the nectar, and the nectar receivers, middle-age workers who toil inside the hive converting the nectar into honey. We will see how the bees can boost their colony's rate of nectar collecting during a honey flow, using the waggle dance and the shaking signal. And we will see how the bees can also boost their colony's rate of nectar processing—to keep the rates of nectar collecting and nectar processing in balance—by means of the tremble dance and stop signal. For this talk, Tom will draw heavily on material reported in his book, *The Wisdom of the Hive*, and he will show videos of bees producing all the signals mentioned above: waggle dance, shaking signal, tremble dance, and stop signal.

Concurrent Session (Education Building)

Mead Workshop

8:30 AM–10:00 AM

Andrew Schwab, Instructor

This mead making class will teach you everything you need to know to make great-tasting mead at home. Andrew will discuss the importance of sanitation and demonstrate how to properly use all the necessary equipment. By making mead during the class, you will be able to see each step. Andrew will discuss the ingredients and chemicals used, as well as some of the basics of fermentation. The class will end with a question and answer period, and also a tasting.

Ongoing Research on Mushrooms and Bees at WSU

9:15 AM

Dr. Steve Sheppard, Washington State University

This talk will cover ongoing and past research findings at Washington State University on both antiviral properties of various mushroom extracts on honey bees and the use of *Metarizium* fungus for direct control of *Varroa* mites. The talk will cover laboratory and field experiments we conducted to test these materials on honey bees and discuss recently acquired data that indicate the potential for these alternative and novel products to improve honey bee colony health.

Break

10:00 AM

Sharing 65 Years of Beekeeping Experiences

10:15 AM

David and Linda Miksa, Miksa Honey Farm

Having exposure to honey bees at a very early crawling age where both parents worked bees probably encouraged David's obsession with them. His father was a honey producer and did pollination. As the oldest, he had to develop his wings early. His first job outside of home was at Cornell University in 1961, where he earned a lot of connections through Dr. R.A. Morse and staff. Thus, he landed a job at USDA in Madison, Wisconsin. After five years, during which he was also building his own bee operation, David

BEEKEEPING ESSENTIALS

Get the Season's Hottest New Items Early!

(800) 456-7923

Beekeeping.GloryBee.com

Give us a call, shop online or request a catalog.



Beekeeping Apparel

Hive Tools

Feeders

Bee Nutrition

Smokers

Extracting Equipment

Queen Rearing Equipment

→ Packaged Bees, Replacement Queens & Local Nucs

(Available to order in December 2016)

GloryBee®

FAMILY OWNED
• SINCE 1975 •

**THE BEEKEEPING
EXPERTS**



Your Local Supplier of Beekeeping Equipment for More Than 40 Years

(800) 456-7923 | Beekeeping.GloryBee.com

became a full-time commercial beekeeper. For 35 years, he produced queens, made comb honey, and pollinated crops in several states and the Bahamas. He has spent the last 16 years full time at his and Linda's Florida farm, which has grown to 300 acres, with the planting of many specialty bee herbs and trees since 1971.

OSU Honey Bee Lab Research Update

11:00 AM

Dr. Ramesh Sagili, Oregon State University

This presentation will discuss some ongoing and completed research projects at Oregon State University Honey Bee Lab including (1) pests and pathogens (Varroa and Nosema) and (2) honey bee nutrition. Further, information on how the current research findings could be potentially used by beekeepers to mitigate pest, pathogen, and nutrition problems in their colonies will also be provided.

Luncheon (Pavilion, Preregistration required) Observations from the Field

NOON

Ellen Topitzhofer, Oregon State University

Ellen has a few observations from her experiences during three field seasons of working with many beekeepers. These are mainly trends that she has seen in large-scale operations. Although these aren't data-driven grand slams, she hopes to spark good conversations in presenting these insights.

Biomitocides for Varroa Mite Management

1:15 PM

Dr. Elina Niño, University of California-Davis

Varroa mites are still one of the primary causes of colony loss worldwide. Development of resistance to available synthetic mitocides and a relatively narrow availability of other Varroa mite management tools calls for efforts to develop novel options for Varroa control. For the past two years, we have been field testing efficacy of several new or improved biopesticides for Varroa mite management. Thus far we have confirmed potential effectiveness of at least five novel products or products novel to the US market, as well as improved previously available treatments. In addition to Varroa mite infestation levels, possible negative effects on colony growth, and survivorship and queen events have been monitored. Laboratory studies are also underway to determine efficacy and toxicity limits for a modified essential oil molecule which will be field tested next year.

How Project Apis m. Supports Bees, Growers, and Beekeepers in Agriculture

2:00 PM

Billy Synk, Project Apis m.

Project Apis m.'s mission is to fund and direct research to enhance the health and vitality of honey bee colonies while improving crop production. This presentation will outline the international, national, and state-specific programs that assist beekeepers, growers, and landowners with improving honey bee health. Highlights will include information about the Honey Bee and Monarch Butterfly Partnership, and forage projects in California. Billy will speak in depth about the Seeds for Bees program and hedgerow restoration.

Break

2:45 PM

Those Other Pollinators, Native Bees

3:00 PM

Dr. John Skinner, University of Tennessee

This presentation describes the diversity of bees in addition to honey bees. It explains where bees fit into classification and examines the major families of native bees, including aspects of biology, sociality, nest architecture, behavior, and value as pollinators. We will look at native bees that are used commercially to pollinate crops such as orchard mason bees, leafcutter bees, alkali bees, and bumble bees, but what about the sweat bees, carpenter bees, miner bees, and orchid bees—Oh my?

Final Comments (Pavilion)

3:45 PM

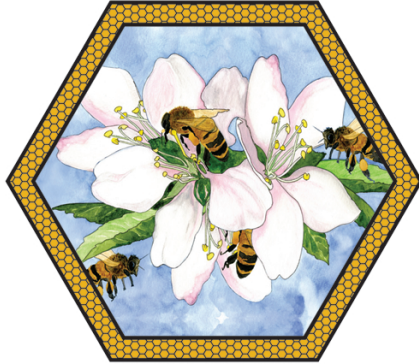
Harry Vanderpool, OSBA President

Adjourn

4:00 PM

Heitkams'

HONEY BEES



Fresh Queens

We Are Selecting for Hygienic Behavior

Italian or Carniolan

Spring - Summer - Fall

Quality Queens - Dependable Service

Call or Write (530) 865-9562
4700 First Ave. Orland, CA 95963
heitkamsbees@hughes.net

10% OFF
when you
purchase
Beekeeping
& Craft Supplies
from our **Retail Store**



29600 SW Seely Ave Suite B Wilsonville, OR 97070
www.BrushyMountainBeeFarm.com | 1-800-BEESWAX



RUHL BEE SUPPLY
— a Division of —
Brushy Mountain Bee Farm



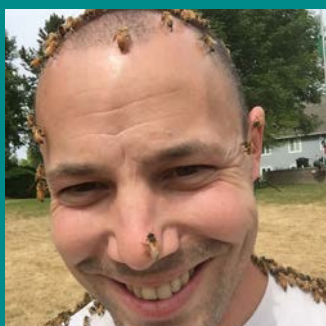
Conference Presenters, Bee Lab Team, and Honey Judges



Carolyn Breece has been a research assistant at the OSU Honey Bee Lab since 2009. She is a committee member, Journey student, and volunteer mentor for the Oregon Master Beekeeper Program. She is also a mom to Simon, wife to Nate, and the great, great grand-niece of Amos Ives Root. She tries to keep the familial tradition of beekeeping alive with her son, nephews, and nieces; however, it is hard to compete with Pokemon Go. Instead, she works hard with a dedicated committee and over 100 committed, energetic volunteers to create programs, workshops, and events for beekeepers so they start or continue a long legacy in the ever-fascinating field of beekeeping.



After a short six-year career as a public school teacher, **George Hansen** and his wife Susan transformed a hobby beekeeping operation into a commercial endeavor. The business now runs 5000+ colonies focused primarily on pollination service in three states. George is an active member of the beekeeping community, promoting the industry's interests as past president of the American Beekeeping Federation, serving a decade as a producer representative on the National Honey Board, and continuing to serve as a trustee on the Foundation for the Preservation of the Honey Bee and on the board of the Bee Informed Partnership. Currently George represents the industry on the national Honey Bee Health Coalition. For twenty years, he has hosted an annual Bee Day at the Foothills Honey Company home site.



Brandon Hopkins grew up in Washington state receiving his BAE and Master's degrees at Eastern Washington University. He didn't start working with bees until he started his PhD program at Washington State University. However, working with honey bees quickly became a passion, and Brandon has found the pursuit of honey bee research to be fascinating. He finished his PhD in the spring of 2014 and currently manages the apiary and germplasm cryopreservation project at Washington State University.



Andony Melathopoulos is an Assistant Professor in Pollination Health Extension at Oregon State University. He holds an Interdisciplinary PhD from Dalhousie University and a Master of Pest Management from Simon Fraser University. Across his career, Andony's research and extension have focused on how to: (1) increase the health of wild and managed pollinator species and (2) better leverage the benefits contributed by pollinating bees to crop yield. Andony has over fifteen years of experience in pollinator health extension, including speaking at industry and public meetings (over a dozen groups), writing for trade journals (over 40 articles), conducting qualitative risk assessment for government agencies, organizing large public fora on issues of sustainability and society, and developing workshops and adult education.



For 35 years, **David Miksa** produced queens, made comb honey, and pollinated crops in several states and the Bahamas. He has spent the last 16 years full time at his and **Linda Miksa's** Florida farm, now grown to 300 acres, where he has planted many specialty bee herbs and trees since 1971. Linda is from Mt. Calvary, Wisconsin, and David is from Transfer, Pennsylvania. They have been married for 45 years, and have 6 children and 11 grandchildren.



The
Weather Café®
by Rufus

Rufus' acclaimed & uniquely informative long-range forecasts go well with your morning beverage every Monday & Friday.

Grab a cup and become a proud patron of The Weather Café®.

► Click on **The WxCafé™**, top right corner of the **www.OVS.com** home page.

Weather always plays a role in beekeeping, so plan ahead confidently.

Oh, by the way, it's **FREE!**

Old Sol Apiaries

Our queens are double vetted and matured longer for higher confidence and greater acceptance rates.



541.582.2337

oldsolbees.com

Selecting for productive, hygienic, disease-tolerant queens since 2000

© The Oregon Garden

AVANT is the new BUZZ!!
AVANT TECNO USA

A series that offers power, user friendliness and many attachment options.

Avant is an excellent machine for load handling thanks to the precise steering and drive control.

Compared with a conventional forklift truck

Avant is superior when working outdoors and on terrains, be it winter or summer.



AVANT
Authorized Dealer

LB T
LINN BENTON TRACTOR
TANGENT SILVERTON

33599 HWY 99E
TANGENT, OR 97389
541-926-1811
812 McClaine St
Silverton, OR 97381
503-873-5355



Here to meet beekeeper needs since 1981!



4905 Turner Rd S.E.
Salem, OR 97317

Specializing in Custom Pallets
Call to get your quote today
503-364-3020



Elina L. Niño is an Assistant Specialist in Cooperative Extension in Apiculture, UC ANR UCCE located in the Department of Entomology and Nematology at UC Davis. Through her extension activities, Dr. Niño works to support beekeepers and the beekeeping industry. Her lab offers a variety of beekeeping courses and educational opportunities for beekeepers, future beekeepers, and the general public. Elina's research interests encompass basic and applied approaches to understanding and improving honey bee health and particularly honey bee queen health. Ongoing research projects include understanding the synergistic effects of pesticides on queen health and adult workers in order to improve beekeeping management practice, as well as testing novel biopesticides for efficacy against Varroa mites.



In his 48th year as a beekeeper, **Morris Ostrofsky**, a retired biology instructor, says he learns something new every day about bees and beekeeping. Since 2010 Morris has participated in the development and implementation of the Oregon Master Beekeeper program. He is both a mentor and an instructor for the program. Morris is also an active member and past president of the Lane County Beekeepers Association. In October 2013, Morris was awarded the Washington State Master Beekeeper certification. Morris is an occasional contributor to *Bee Culture* magazine. His passion for teaching and beekeeping becomes apparent when he shares his knowledge with others. An interest in genetics and queen rearing has led to a quest to breed locally adapted queens using the Miller Method.



Ramesh Sagili is a honey bee research and extension faculty in the Department of Horticulture at Oregon State University. He obtained his PhD in Entomology from Texas A&M University in 2007 specializing in honey bee research. His primary research focus at OSU is honey bee health, nutrition, and pollination. His appointment also includes extension and hence he works closely with the stakeholders, i.e., both beekeepers and producers. Ramesh initiated the creation of Oregon Master Beekeeper Program in 2010 and chaired the Governor's Task Force on Pollinator Health in 2014. His goal is to establish a vibrant and dynamic honey bee research and extension program at OSU that will cater the needs of beekeepers and producers, and promote sustainable apiculture.



Andrew Schwab is a life-long, second-generation beekeeper. Having grown up in the honey-producing state of North Dakota, Andrew started making mead about ten years ago. In his search of that perfect mead, he has garnered numerous awards from national mead competitions along the way.



Thomas D. Seeley, biologist and writer, is a professor in the Department of Neurobiology and Behavior at Cornell University. He teaches courses on animal behavior and does research on the behavior, social life, and ecology of honey bees. Tom is an avid beekeeper and began keeping bees while a high school student, when he shook a swarm into a box and brought it home. His scientific work is summarized in four books: *Honeybee Ecology* (1985), *The Wisdom of the Hive* (1995), *Honeybee Democracy* (2010), and *Following the Wild Bees* (2016). In recognition of his scientific contributions, he has been honored by an Alexander von Humboldt Distinguished U.S. Scientist Award, awarded a Guggenheim Fellowship, and elected a Fellow of the American Academy of Arts and Sciences.

Pacific

RISK MANAGEMENT, Inc.

Leavitt Group

Agribusiness Insurance | Salem, OR | (503) 399-2100



© The Oregon Garden



FOR ALL YOUR PROCESSING NEEDS

MAXANT
HONEY PROCESSING EQUIPMENT

AMERICAN MADE IN OUR NEW FACTORY
978-772-BEES
www.MaxantIndustries.com

3100 EXTRACTOR
MADE IN USA



PENDELL'S CORDOVAN ITALIAN QUEENS

Ph: (530) 963-3062

Mite Resistance

Gentle

Honey Producers



VSH Trait

Isolated Mating Yard

Hygienic



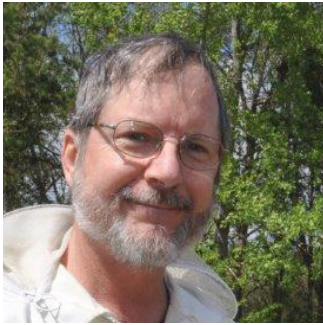
Frank & Sheri Pendell
Fouts Spring Rd
P.O. Box 40
Stonyford, CA 95979



Orders only: 877-963-3062
Fax: (530) 963-3063
fpendell@stonyford.com
www.pendellapiaries.com



Steve Sheppard is the Thurber Professor of Apiculture and Chair of the Department of Entomology at Washington State University. His interest in honey bees derives from early childhood days spent in his great grandfather's workshop. Steve's MSc research was on pollination biology and his PhD project shifted to research on population genetics and evolution in honey bees. Prior to joining the faculty at WSU, Steve conducted studies on Africanized honey bees and the genetic processes that accompany insect range expansions. Since 1996, Steve and his lab have focused on honey bee population genetics and evolution and conducted a long-term breeding program to select honey bees adapted for PNW conditions with improved tolerance of mites and diseases. Additional work has focused on honey bee health issues.



John Skinner is Professor and Extension Apiculture Specialist at the University of Tennessee, where he has worked on research, teaching, and extension for 26 years. Research included mite pest management, pesticides movement in soil and from seed treatments, pollination ecology of native and crop species, plantings for pollinators, and developing web-based information about bees and beekeeping. He trains extension agents to work with local bee associations throughout Tennessee. John coordinates a Master Beekeeper Program, leads the Bee Health eXtension site, and is part of the BIP and NAPPC to reduce colony losses. He enjoys reading, hiking, fly fishing and tying, singing, and foraging.



Billy Synk, Director of Pollination Programs for Project Apis m., manages the "Seeds for Bees" program which has installed over 3,000 acres of bee forage cover crops in California's almond orchards. Billy comes to us from UC Davis, where he managed bees and participated in bee research projects with Drs. Brian Johnson and Neal Williams. He was trained in beekeeping by noted bee breeder-geneticist Sue Cobey at Ohio State University, where he received a BS in environmental policy and management. Billy worked with photographer Anand Varma on the "Quest for a Superbee" article published in the May 2015 edition of *National Geographic* and the incredible honey bee metamorphosis video.



Ellen Topitzhofer is part of the Pacific Northwest Tech Transfer Team, which operates out of Oregon State University. Ellen works with migratory beekeepers in Oregon, Idaho, and Washington. The primary goal as the NW Tech Team is to monitor colony health and gather pesticide exposure information from diverse cropping systems. She received her BS from the University of Minnesota and MS from Oregon State University, where she studied honey bee nutrition. Ellen is also a volunteer mentor for the Oregon Master Beekeeper Program and enjoys teaching others about the joy of beekeeping.



Thom Trusewicz has been a hobbyist beekeeper over the last 16 years. He teaches an annual beekeeping class for beginners at Clatsop Community College every winter and at the Oregon State Beekeepers Association Fall Conference. He does several presentations on beekeeping and pollination to agricultural and service organizations and garden shops every year all over the Pacific Northwest. He is also a mentor in the Oregon Master Beekeeper Program.



Bob Walters is the Business Development Director for FieldWatch, where he is responsible for the increased acceptance and adoption of FieldWatch in member and nonmember states. FieldWatch was developed by a multi-stakeholder group after being created by the Purdue University Agricultural and Biological Engineering Departments. The nonprofit company offers mapping and communication tools, which are just one element of a successful co-existence of specialty producers, large-scale commodity farmers, commercial and private applicators, and beekeepers. FieldWatch manages and operates the free and voluntary DriftWatch Specialty Crop Site and BeeCheck Apiary Registries. BeeCheck has become an essential communication component of Managed Pollinator Protection Plans in 14 states.



Honey Bee Lab Team Member **Ellen Leinhaupel** grew up in Santa Rosa, California. She is attending Oregon State University and earning a Bachelor of Science in Horticulture. The Oregon Master Beekeeper Program facilitated her interest in pollinators, and she has been working for the OSU Honey Bee Lab for about a year and a half. She is excited to explore new opportunities in urban gardening and landscape design and development.



Honey Bee Lab Team Member **Hannah Lucas** was a free-range child, locally raised on a farm right here in the Willamette Valley. She went north to Washington for most of her schooling, including an MS in Biology. Since then she has lived in a lot of places and studied several kinds of critters in many different ecosystems. Hannah's love for bees developed relatively late in life, but once it did, she began to describe her ideal job as one that allowed her to use both her molecular biology education and field biology experience to investigate and ameliorate the problems faced by honey bees and their keepers these days. Naturally, she is very happy to be working in Dr. Ramesh Sagili's Honey Bee Lab at Oregon State University.



Honey Judge **Marjie Ehry** is a long time member of OSBA. She was the first woman in the United States to serve as president of a state beekeeping association from 1988–1992. Marjie also represented Oregon on the National Honey Board for nine years. She is founding member of Oregon Women for Agriculture and American Agri-Women. Marjie's passion has been working within other agricultural groups, schools, and the public promoting beekeeping and the part the honey bee plays in our daily lives.



Honey Judge **Scott Ingles** was born 1950 in Chicago, Illinois. He graduated from the University of Montana at Missoula in 1973 with a BS in Pharmacy and commissioned a 2nd Lt in the USAF. He attended pilot training and was stationed at Fairchild AFB WA for his first assignment. While in the USAF, he earned a MS degree in Aeronautical Science from Embry-Riddle Aeronautical University. In 2000, he retired from the USAF and moved back to Spokane WA. Scott took up beekeeping in 2002 and joined Inland Empire Beekeepers Association (IEBA). In 2003, he entered the Washington State Master Beekeepers Certification Program and earned Apprenticeship and Journeyman level certifications. In 2010, he compiled a judging manual for IEBA. Scott heads the honey judging panel for Spokane Interstate Fair.

Note: Additional presenter information can be found at: osba2016.orsba.org.

Thank You!



Apis mellifera Linnaeus, 1758 | *Apis mellifera adansonii* * *Apis mellifera adami* * *Apis mellifera anatoliaca* * *Apis mellifera capensis* * *Apis mellifera carnica* * *Apis mellifera caucasia* * *Apis mellifera cecropia* * *Apis mellifera cypria* * *Apis mellifera iberiensis* * *Apis mellifera intermissa* * *Apis mellifera jemenitica* * *Apis mellifera lamachusii* * *Apis mellifera ligustica* * *Apis mellifera litorea* * *Apis mellifera macedonica* * *Apis mellifera macedonica sahariensis* * *Apis mellifera monticola* * *Apis mellifera pomonella* * *Apis mellifera ruttneri* * *Apis mellifera sahariensis* * *Apis mellifera scutellata* * *Apis mellifera siciliana* * *Apis mellifera syriaca* * *Apis mellifera unicolor* | *Apis mellifera*

THANK YOU to everyone attending, presenting, exhibiting and advertising, donating and participating in the silent and benefit auctions, working behind the tables and behind the scenes in planning, registering, sorting, tracking, figuring things out, and all not mentioned. You made this conference happen!

Please take a moment before leaving to provide feedback by filling out an **Evaluation Form** to help us continue to improve our annual conference. You can drop yours off at the Registration Desk or as you exit the Pavilion.

Best Tire Value PROMISE[®]

WITH EVERY PASSENGER & LIGHT TRUCK TIRE PURCHASE

Whatever the road throws at you — from potholes to nails — any road hazard, our **FREE GUARANTEE** protects you



Doing the right thing matters.[®]

www.LesSchwab.com

✓ Peace of Mind Tire Protection

- If a Tire is Damaged Beyond Repair, We'll Replace its Value
- Our Work is Guaranteed for the Life of Your Tires
- Free Pre-Trip Safety Checks

✓ Lifetime Tire & Mileage Care

- Free Flat Tire Repairs
- Free Tire Rotations
- Free Tire Rebalancing
- Free Air Checks
- Free Brake & Alignment Checks
- Hundreds of Locations to Serve You



Over 450 Les Schwab locations throughout the West! • www.LesSchwab.com



Regional Representatives

North Coast: Stan Scotton

South Coast: Mureen Walker

Columbia Basin: Bill Edwards

Eastern Oregon: Jordan Dimock

Portland Metro: Tom Cinquini

Southern Oregon: Sarah Red-Laird

North Willamette Valley: Steven Coffman

South Willamette Valley: Karessa Torgerson

Regional Associations

Cascadia Queen Breeders

Central Coast Beekeepers

Central Oregon Beekeepers

Coffee Creek Beekeepers

Coos County Beekeepers

John Day River Beekeepers

Klamath Basin Beekeepers

Lane County Beekeepers

Linn-Benton Beekeepers

Oregon South Coast Beekeepers

Portland Metro Beekeepers

Portland Urban Beekeepers

Southern Oregon Beekeepers

Tillamook County Beekeepers

Tualatin Valley Beekeepers

Willamette Valley Beekeepers

2016 Officers

Oregon State Beekeepers Association



President: Harry Vanderpool



Vice President: Jason Rowan



Secretary: Mary Edwards



Treasurer: Jeff Milligan



Past President: Paul Andersen

www.orsba.org

Safe travels home, Everyone.

Good wishes for ongoing learning.

