OREGON STATE BEEKEEPERS ASSOCIATION

2013 FALL CONFERENCE

October 31–November 2, 2013

Seaside Civic & Convention Center
Seaside, Oregon

OREGON STATE BEEKEEPERS ASSOCIATION

Conference Program

Welcome to the OSBA Fall Conference!

October 31–November 2, 2013
Seaside, Oregon

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OREGON STATE BEEKEEPERS ASSOCIATION
2013 Officers

President: Paul Andersen
19255 SW Prospect St, Aloha OR 97007
503.332.5410 (cell)
paulande@easystreet.net

Vice President: Dewey Caron
302.353.9914 (April–October)
carond@hort.oregonstate.edu

Secretary: Carolyn Breece
743 NW 18th St, Corvallis OR 97330
541.207.3668
carolyn_breece@yahoo.com

Co-Treasurer: Paul Kowash
5959 SW Taylors Ferry Rd, Portland 97219
503.452.2664; 503.367.5242 (cell)
paulkowash@aol.com

Co-Treasurer: Kathleen Kowash
5959 SW Taylors Ferry Rd, Portland 97219
503.452.2664
kowash10@aol.com

Past President: Jan Lohman
77225 Colonel Jordan Rd, Hermiston OR 97838
541.567.3209; 541.980.0304 (cell)
jan.lohman55@gmail.com

www.orsba.org

Special Events

Halloween Social & Film
THURSDAY, 7:00 PM — **Necanicum Room/Pacific Room**
Coordinated by Sarah Red-Laird

Honey Show
FRIDAY, after 10:00 AM (SUBMISSIONS UNTIL 10:00 AM AT REGISTRATON DESK) — **Lobby**
Judging by Dewey Caron and Sarah Red-Laird (honey show), Susan Ellis (photography)
Note: Winners to be announced at the Banquet Auction

Silent Auction
FRIDAY, 8:30 AM–4:00 PM — **Necanicum Room**
Coordinated by Deb Morgan

Bee School
FRIDAY, 8:30 AM–3:00 PM (ATTEND ALL OR PORTIONS THROUGHOUT THE DAY) — **Riverview Room**
Instructed by Thom Trusewicz

Oregon State University Honey Bee Lab
FRIDAY and SATURDAY, 9:00 AM–4:00 PM — **Seamist Room**
Staffed by Keith Richards and Ciera Wilson

Research Luncheon
FRIDAY, 11:45 AM — **Necanicum Room**
George Hansen presenting

Conference Banquet, and Banquet Auction
FRIDAY, 7:00 PM — **Necanicum Room**
Dewey Caron presenting

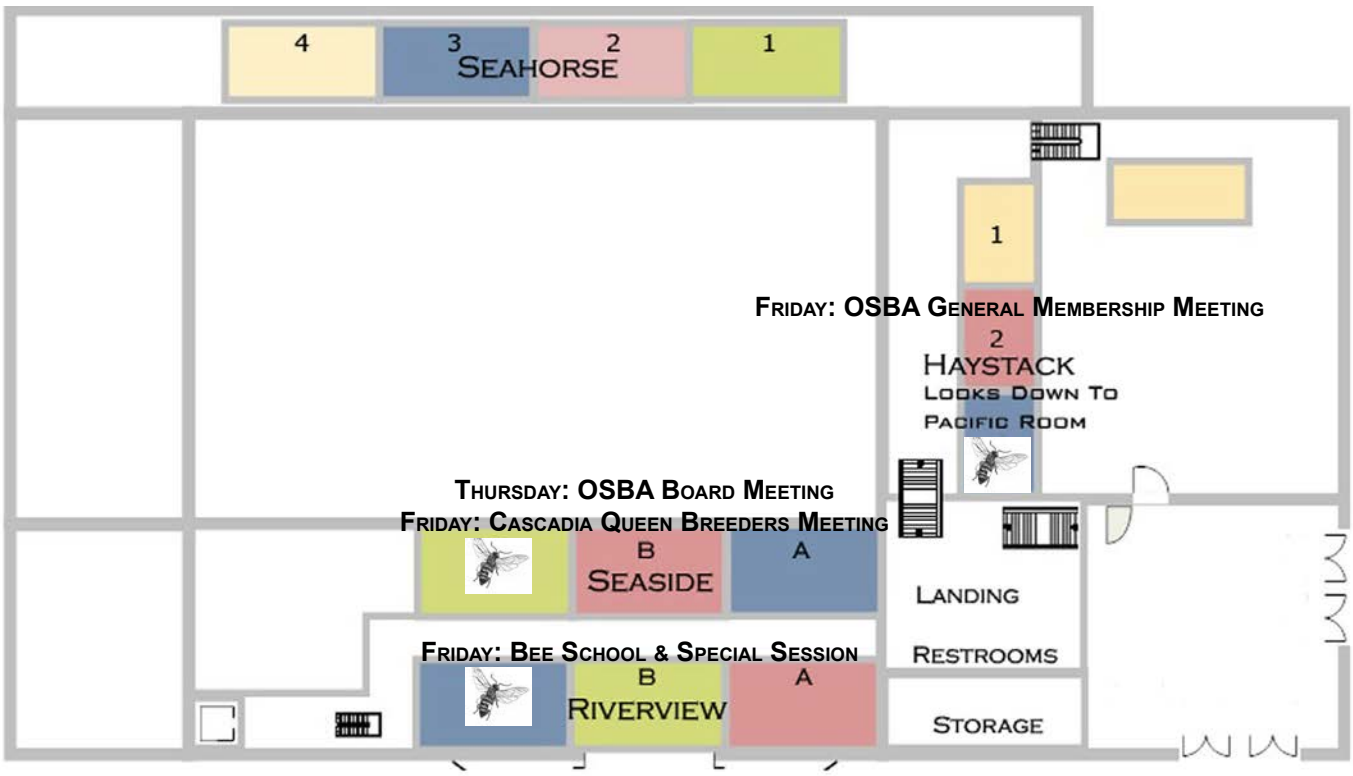
Banquet Auction
FRIDAY, FOLLOWING BANQUET — **Necanicum Room**
Coordinated by Jordan Dimock

Endowment Breakfast
SATURDAY, 7:00 AM — **Room To Be Announced**
Hosted by Kenny Williams; Marion Ellis presenting

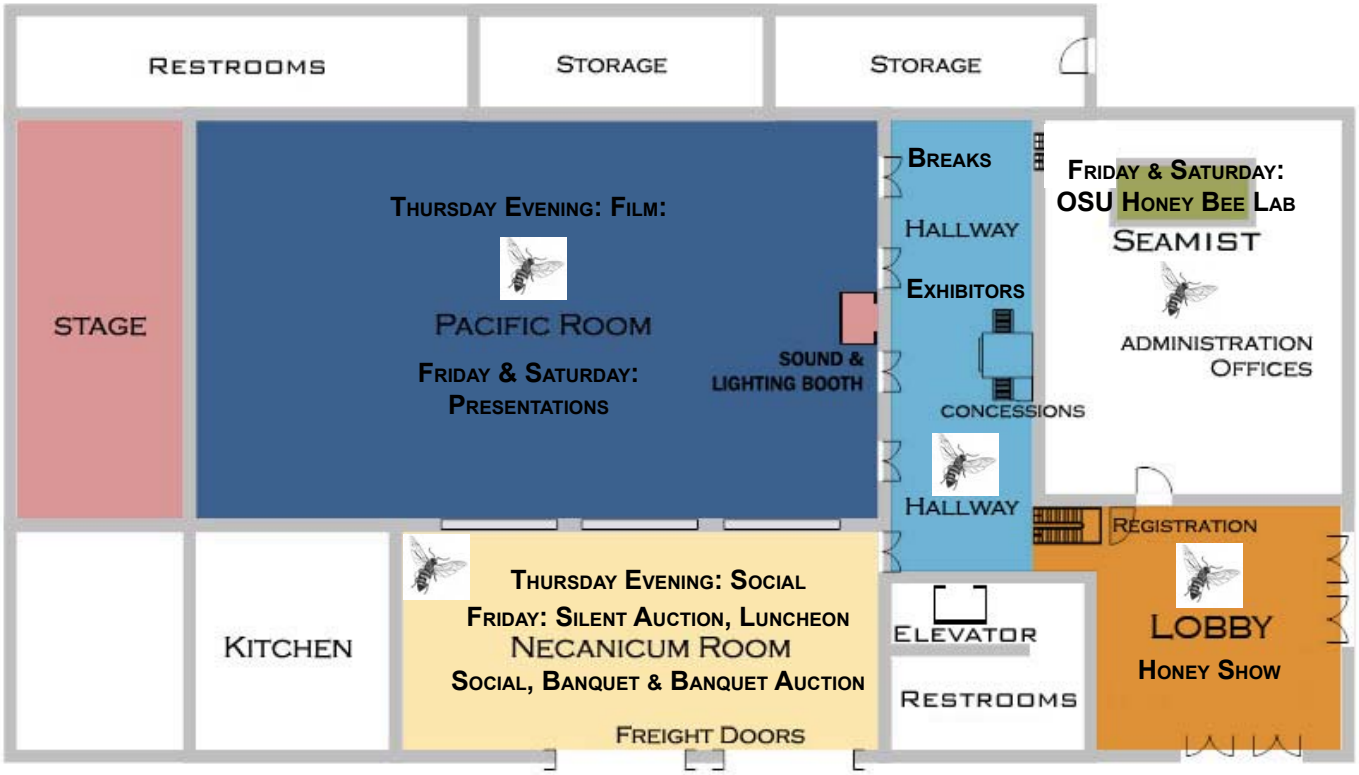
Luncheon: Chat with the Queen Producers
SATURDAY, 11:45 AM — **Room To Be Announced**
Hosted by Cascadia Queen Breeders; Dan Harvey, Morris Ostrofsky, and Frank and Sheri Pendell chatting

Seaside Civic & Convention Center Floor Plan

Upper Level



Main Level



Conference Exhibitors

ATAGO U.S.A., Inc.
11811 NE First Street, Suite 101
Bellevue, Washington 98005
www.atago-usa.com

Beeline Apiaries & Woodenware
19019 Moon Road SW
Rochester, Washington 98579
www.honeybeehabitat.com

John Cox Apiaries
2226 Keaton Road
Stevinson, California 95374
coxbees@gmail.com

Glory Bee Foods
120 N Seneca Road
Eugene, Oregon 97402
www.glorybee.com

Mann Lake
501 1st Street S
Hackensack, Minnesota 56452
www.mannlakeltd.com

Project Apis m.
PO Box 3157
Chico, California 95927
projectapism.org

Ruhl Bee Supply
17845 SE 82nd Drive
Gladstone, Oregon 97027
www.ruhlbeesupply.com/

Shastina Millwork Corp
2276 Avenue H
White City, Oregon 97503
www.shastinamillwork.com

True Wood Products
992 A Highway 395 S
Addy, Washington 99101
www.truesurveysupply.com

Western Bee Supplies, Inc
PO Box 190
Polson, Montana 59860
www.westernbee.com

Program Abstracts

Friday, November 1

Opening

8:30 AM, PACIFIC ROOM

Presenter: **Paul Andersen**, President, Oregon State Beekeepers Association

Bee School

8:30 AM–3:00 PM, RIVERVIEW ROOM

Presenter: **Thom Trusewicz**, Astoria Beekeeper *and* OSBA Webkeeper

This beekeeping class covers beekeeping history and equipment; honey bee anatomy and physiology; the role of the worker, drone, and queen; bee behavior, mating, and communication; pests and diseases; swarming; honey, wax, propolis, and other hive products.

Oregon State University Honey Bee Lab

9:00 AM–4:00 PM, SEAMIST ROOM

Lab Techs: **Andrew Richards** *and* **Ciera Wilson**, Honey Bee Lab, Oregon State University

Stop by to see how the OSU Honey Bee Lab processes samples for the Honey Bee Health Survey. We will demonstrate how we analyze samples for Nosema, count Varroa mites, and dissect honey bees to look for tracheal mites and sample hypopharyngeal glands. We can also tell you about current research projects and extension events. Drop your own samples off for analysis after the conference.

Know Thy Enemy: Predictors of Honey Bee Colony Death

8:45 AM, PACIFIC ROOM

Presenter: **Keith Delaplane**, University of Georgia

It's widely understood that bee decline is caused by interacting factors, ranging from diseases to parasites to land-use patterns. In spite of this generalization, there are a few factors that consistently rise to the top in surveys and predictive models. Knowing where to concentrate one's management efforts is a good step toward dealing with this ongoing crisis.

Update on Current Bee Research and Extension Activities at Oregon State University

10:00 AM, PACIFIC ROOM

Presenter: **Ramesh Sagili**, Oregon State University

This presentation will discuss several ongoing and completed research projects at the Oregon State University Honey Bee Lab that include: (1) Honey bee nutrition, (2) Efficacy of Varroa and Nosema treatments, (3) Effects of select pesticides on honey bee survival and behavior, (4) Estimation of prevalence and intensity of *Nosema ceranae*, and (5) Longitudinal monitoring of health in commercial honey bee colonies.

40 Years of Beekeeping in Central California

11:00 AM, PACIFIC ROOM

Presenter: **Gene Brandi**, California Beekeeper

I will discuss the changes that have occurred in California beekeeping since the early 1970s when I began keeping bees. This will include the evolution of beekeeping management strategies as well as some of the regulatory and political decisions that we have endured over the past four decades. Of course, I must also address almond pollination and the impact of having the largest pollination job in the world, and most of the country's commercial honey bees, right in my back yard.

Research Luncheon: The Future of Beekeeping

11:45 AM, NECANICUM ROOM

Presenter: **George Hansen**, Foothills Honey Company

Timing Varroa Suppression Measures
1:15 PM, PACIFIC ROOM
Presenter: **Marion Ellis**, University of Nebraska
This presentation will explore factors to consider in timing Varroa suppression measures, including: mite population growth, mite invasion pressure, mite suppression options, the effectiveness of mite suppression options, and windows of opportunity for implementing mite suppression measures. The session will include a review of all the mite suppression options and the optimum timing for their implementation.

Panel on Queen Health Issues
2:00 PM, PACIFIC ROOM
Moderator: **Pat** *or* **Russell Heitkam**, Heitkams' Honey Bees
Abstract not available.

Honey Bee Health and Varroa Resistance
3:15 PM, PACIFIC ROOM
Presenter: **Bob Danka**, USDA, Baton Rouge, Louisiana
A complex of factors appears to be behind declining health of honey bees. Among these factors, the Varroa mite is the single most identified cause of colony losses. While miticide treatments usually are used for mite control, the potential advantages of genetically based resistance to Varroa are widely recognized. Research at our laboratory has taken two different approaches that yielded bees with documented Varroa resistance. Russian honey bees and bees with resistance based on Varroa sensitive hygiene (VSH) slow the population growth of Varroa mites in their colonies. Russian and VSH bees are being used by a variety of beekeepers as significant tools to manage Varroa with no or fewer miticide treatments. At this relatively early stage of adoption of the technology, genetically resistant bees tend to be used most successfully by beekeepers who are committed to reduced-chemical beekeeping, are more proficient beekeepers, and manage fewer colonies.

Bees and Bee-Yond: A Look at Photography
3:15 PM, RIVERVIEW ROOM
Presenter: **Susan Ellis**, Nebraska Photographer
Among the many photographers who, like her, would prefer to take better photos of family, vacations, and so forth, Susan will include some "do's" and "don't's" with photo illustrations of both—and save time for a Q&A session.

Update on Oregon Master Beekeeper Program
4:00 PM, PACIFIC ROOM
Presenters: **Carolyn Breece**, Oregon State University, *and* **Jan Lohman**, Vazza Farms
In its two years of operation, the Oregon Master Beekeeper Program had educated about 275 beekeepers and issued 101 Apprentice Beekeeper certificates. This year we have launched the Journey Beekeeper level, which gives participants the opportunity to share their knowledge through service activities and receive advanced beekeeping education. We thank the 51 mentors for their volunteer service in training new Apprentices, and we welcome 22 new mentors for the 2014 class. Next year, we look forward to working with the new Apprentices and Journey students, and we will work on developing the Master Beekeeper level. If you are interested in participating in the Oregon Master Beekeeper Program, please visit: www.oregonmasterbeekeeper.org.

OSBA General Membership Meeting
4:15 PM, HAYSTACK ROOM

Cascadia Queen Breeders Meeting
5:15 PM, SEASIDE ROOM
Experienced beekeepers interested in queen rearing are welcome!

Social Hour
6:00–7:00 PM, NECANICUM ROOM

Banquet: To Bee or Not To Bee
7:00 PM, NECANICUM ROOM
Presenter: **Dewey Caron**, *OREGON STATE UNIVERSITY*
Answering life's four basic questions, especially a light-hearted look at what it means to BEE a beekeeper and what we hope it will NOT BEE.

FOLLOWED BY **Banquet Auction**

Saturday, November 2

Breakfast Fundraiser for Endowment
7:00 AM, ROOM TO BE ANNOUNCED
Host: **Kenny Williams**, *WILD HARVEST HONEY*; **Presenter**: **Marion Ellis**, *UNIVERSITY OF NEBRASKA*

Oregon State University Honey Bee Lab
9:00 AM–4:00 PM, SEAMIST ROOM
Lab Techs: **Andrew Richards** *and* **Ciera Wilson**, Honey Bee Lab, Oregon State University
Stop by to see how the OSU Honey Bee Lab processes samples for the Honey Bee Health Survey. We will demonstrate how we analyze samples for Nosema, count Varroa mites, and dissect honey bees to look for tracheal mites and sample hypopharyngeal glands. We can also tell you about current research projects and extension events. Drop your own samples off for analysis after the conference.

Varroa, Healthy Bees, and Pollination
8:15 AM, NECANICUM ROOM
Presenter: **Bob Danka**, *USDA, BATON ROUGE, LOUISIANA*
Varroa mites are a challenge for all beekeepers, including those who pollinate crops. We have evaluated Varroa-resistant bees for functionality in conjunction with several commercial beekeepers who pollinate crops that included almonds, and fruits on the East Coast. In general, Russian and VSH bees performed well (regarding colony size, parasite populations, and honey production) when compared to Italian bees when all bees were not treated against mites during the season. Research to support use of bees for pollination has shown that colony size in Russian bees can be increased most by continuously feeding protein (especially with pollen) and sucrose syrup from early November. Beekeepers are heavily involved in maintenance and further selection of Russian bees for Varroa resistance and honey production. Bees with VSH-based resistance are being selected from colonies operated by several large-scale crop pollinators and pooled to make an improved breeding population called *Pol-line*.

Washington State University Honey Bee Research and Genetic Repository Update
8:15 AM, PACIFIC ROOM
Presenter: **Steve Sheppard**, *WASHINGTON STATE UNIVERSITY*
Abstract not available.

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Oregon State Beekeepers Association
2013 Fall Conference Agenda

	Thursday, October 31	
9:00 AM–5:00 PM	**Oregon Master Beekeeper Institute**	Necanicum Room/ Seamist Room
5:15 PM	**OSBA Executive Committee Meeting**	Seaside Room
5:00–9:00 PM	**Registration**	Lobby
7:00 PM	**Halloween Social**	Necanicum Room
	Movie (to be announced) to follow	Pacific Room
	Friday, November 1	
8:30 AM–4:00 PM	**Silent Auction**	Necanicum Room
8:30 AM–3:00 PM	**Bee School** Thom Trusewicz, *Oregon Beekeeper and OSBA Webkeeper*	Riverview Room
9:00 AM–4:00 PM	**Open Bee Lab, OSU** Bring samples or drop in to view/ask questions Staffed by Andrew Richards *and* Ciera Williams	Seamist Room
10:00 AM	**Entries to Honey Show Due**	Lobby
8:30 AM	**Welcome** Paul Andersen, *OSBA President*	Pacific Room
8:45 AM	**Know Thy Enemy: Predictors of Honey Bee Colony Death** Keith Delaplane, *University of Georgia*	Pacific Room
9:30 AM	**Break**	
10:00 AM	**Update on Current Bee Research & Extension Activities at Oregon State University** Ramesh Sagili, *Oregon State University*	Pacific Room
11:00 AM	**40 Years of Beekeeping in Central California** Gene Brandi, *California Beekeeper*	Pacific Room
11:45 AM	**Research Luncheon**: **The Future of Beekeeping** George Hansen, *Foothills Honey Company*	Necanicum Room
1:15 PM	**Timing Varroa Suppression Measures** Marion Ellis, *University of Nebraska*	Pacific Room
2:00 PM	**Panel on Queen Health Issues** Moderated by Pat *or* Russell Heitkam, *Heitkams' Honey Bees*	Pacific Room
2:45 PM	**Break**	
3:15 PM	**Honey Bee Health and Varroa Resistance** Bob Danka, *USDA, Baton Rouge, Louisiana*	Pacific Room
3:15 PM	**Bees and Bee-Yond**: **A Look at Photography** Susan Ellis, *Nebraska Photographer*	Riverview Room
4:00 PM	**Update on Oregon Master Beekeeper Program** Carolyn Breece, *Oregon State University, and* Jan Lohman, *Vazza Farms*	Pacific Room
4:15 PM	**General Membership Meeting**	Haystack Room
5:15 PM	**Cascadia Queen Breeders Meeting**	Seaside Room
6:00 PM	**Social Hour**	Necanicum Room
7:00 PM	**Banquet**: **To Bee or Not To Bee** followed by **Banquet Auction** Dewey Caron, *Oregon State University*	Necanicum Room

Oregon State Beekeepers Association

2013 Fall Conference Agenda (continued)

	Saturday, November 2	
7:00 AM	**Endowment Breakfast** Kenny Williams, *Wild Harvest Honey*; Marion Ellis, *University of Nebraska*	To Be Announced
	Joint Sessions	
8:15 AM	**Varroa, Healthy Bees, and Pollination** Bob Danka, *USDA, Baton Rouge, Louisiana*	Necanicum Room
8:15 AM	**Washington State University Honey Bee Research and Genetic Repository Update** Steve Sheppard, *Washington State University*	Pacific Room
9:00 AM	**Project Apis m.: Focus on Funding and Forage** Hannah Ribotto, *PAm*	Necanicum Room
9:00 AM	**Complementary Approaches to Honey Bee Germplasm Preservation: Above-Freezing, Long-Term Storage and Cryopreservation** Brandon Hopkins, *Washington State University*	Pacific Room
9:45 AM	**Break**	
	Queen Rearing Workshop, Co-sponsored by Cascadia Queen Breeders	
10:15 AM	**Kona Queen Hawaii Revisited** Gus Rouse, *Kona Queens*	Necanicum Room
11:00 AM	**The Miller Method: Graft-Free Queen Rearing** Morris Ostrofsky, *Oregon Beekeeper*	Necanicum Room
	Bees & Humans	
10:15 AM	**Society or Superorganism: Fact or Fiction?** Keith Delaplane, *University of Georgia*	Pacific Room
11:00 AM	**Beekeeping in the 22nd Century** George Hansen, *Foothills Honey Company*	Pacific Room
11:45 AM	**Lunch** (in and around Seaside)	
11:45 AM	**Cascadia Queen Breeders Luncheon** (by invitation) Chat with the Queen Producers	To Be Announced
	Keeping Bees Healthy	
1:15 PM	**Reducing Bee Poisoning from Pesticides** Louisa Hooven, *Oregon State University*	Necanicum Room
2:00 PM	**You Are What You Eat: A Look at Honey Bee Diet Diversity** Ellen Topitzhofer, *Oregon State University*	Necanicum Room
	Protecting Pollinating Bees	
1:15 PM	**Pollination of Oregon Seed Crops: Honey Bees and Native Bees** Sujaya Rao, *Oregon State University*	Pacific Room
2:00 PM	**Working Toward Treatment-Free Beekeeping** Dewey Caron, *Oregon State University*	Pacific Room
2:45 PM	**Break**	
3:15 PM	**Honey Bee Expert Panel** (topic to be announced at conference) Moderated by Dewey Caron, *Oregon State University*	Pacific Room
4:00 PM	**Closing**	Pacific Room

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Project Apis m.: Focus on Funding and Forage

9:00 AM, Necanicum Room

Presenter: **Hannah Ribotto**, PAm

Project Apis m.'s (PAm) mission is to enhance the health of honey bees. We accomplish this by sourcing the top scientists in the nation, and even a few internationally, and working with them to direct and fund their research. We strive to support projects that provide practical solutions to beekeepers. Since our inception in 2006, we have funded over 40 different projects and infused more than $2.5 million in bee research. We are accomplished in obtaining grants and corporate donations for bees and putting the funding to good use. We are funding BMP development, BIP Teams, WSU's Germplasm Repository, PSU's Pesticide Cost-Share program, and developing honey bee forage sites, to name just a few of our projects. We helped install hose bibs for bee trucks at California border stations, we funded the residue studies to legalize Amitraz use, we purchased a Nexcelom System at NCSU for queen and drone screening, and we help bring the IVDS System to Dave Wick's lab, and build a Bee Pathogen Chip at the DeRisi Lab at UCSF.

PAm managed a 2010 Specialty Crop Block Grant awarded to the California State Beekeepers Association. This funding focused on "Improving Forage Resources for Pollinators of California Specialty Crops." Completed in the 3-year period were: bee strength evaluations for rich vs. poor forage sites, seed mixes were identified for fall and spring, seed suppliers were sourced, nutritional analyses of seed mixes were performed, forage plots throughout California were initiated, public lands for bee pastures were sought out, and the economical and ecological benefits for growers were warranted. An aggressive campaign was launched to raise public awareness of the need for clean and abundant forage for honey bees through media coverage. A second grant has been awarded to PAm, "Building California Bees for California Specialty Crops," further building on the forage foundation. PAm will continue focusing on identifying flowers beneficial to honey bees, targeting wildflowers and oilseeds, and developing mixes suitable for the Central Valley, Coastal Range, and Sierra Foothills. Grant funding has been leveraged with Monsanto funding for PAm to source and purchase mustards, clovers, and vetch. With the cooperation of almond growers, seeds are sowed as nutritional and natural forage resources for honey bees prior to and after almond bloom.

Complementary Approaches to Honey Bee Germplasm Preservation: Above-Freezing, Long-Term Storage and Cryopreservation

9:00 AM, Pacific Room

Presenter: **Brandon Hopkins**, Washington State University

The implementation of artificial insemination (AI) for the purpose of selective breeding has accelerated the proliferation of desired traits in many important agricultural species. While the field of apiculture has had the ability to perform AI, it has lagged behind in the development of techniques for storage of semen used in inseminations. Fresh semen (held above freezing) for use in AI must be used quickly, within a couple days, or in the case of honey bees within a week or two. The alternative is to cryopreserve (freeze to -196^{o}C) the semen in liquid nitrogen. Cryopreserved semen can be stored for an indefinite amount of time and thawed for use in an insemination when needed. The advantages and disadvantages to these two techniques, and the current state of development will be presented here.

Queen Rearing Workshop

Co-sponsored by Cascadia Queen Breeders

Kona Queen Hawaii Revisited

10:15 AM, Necanicum Room

Presenter: **Gus Rouse**, Kona Queens

Abstract not available.

The Miller Method: Graft-Free Queen Rearing
11:00 AM, NECANICUM ROOM
Presenter: **Morris Ostrofsky**, Oregon Beekeeper
There are many reasons to raise your own queens. For many beekeepers, however, the idea of grafting and producing their own queens is intimidating. This presentation shares one graft-free queen rearing technique designed to produce a few queens. The Miller Method is an opportunity for backyard beekeepers with a few years experience to take an active role in raising their own, locally adapted queens. The presentation takes beekeepers through the steps of planning, preparation, and implementation of the Miller Method. The presentation includes photos of the 2013 queen rearing project along with some lessons learned. The "take home" message is "you can do this" and in the process add to your beekeeping knowledge and have a rewarding experience at the same time.

BEES & HUMANS

Society or Superorganism: Fact or Fiction?
10:15 AM, PACIFIC ROOM
Presenter: **Keith Delaplane**, University of Georgia
Recent thinking in sociobiology has called into question whether the honey bee colony is best thought of as a society of individuals or a single entity, a superorganism. Thinking of the colony as a superorganism helps beekeepers better understand phenomena they see every day in the beehive and hints at better ways to manage honey bee health.

Beekeeping in the 22nd Century
11:00 AM, PACIFIC ROOM
Presenter: **George Hansen**, Foothills Honey Company
Forty years ago when I started beekeeping, there weren't any cell phones. There weren't charge cards, so you would need cash to buy gas. There was no such thing as an ATM. There weren't any Varroa or tracheal mites in the US. Bee supplies were sold in local hardware stores and even in the Sears catalog. There was hardly any pollination that paid beekeepers for their service. The first Apple 1 computer was released in 1976. The World Wide Web became available to the public much later, in 1991. So what will beekeeping be like in 50 or 100 years? This is the stuff of science fiction. Starting with a discussion of things that are probably possible today, if anybody put their mind and money to it, I want to take you where no beekeeper has gone before.

Lunch
11:45 AM, IN AND AROUND THE CITY OF SEASIDE

Cascadia Queen Breeders Luncheon: CHAT WITH THE QUEEN PRODUCERS
11:45 AM, ROOM TO BE ANNOUNCED
Presenters: **Dan Harvey**, **Morris Ostrofsky**, *and* **Frank** & **Sheri Pendell**

KEEPING BEES HEALTHY

Reducing Bee Poisoning from Pesticides
1:15 PM, NECANICUM ROOM
Presenter: **Louisa Hooven**, Oregon State University
We have completed revision of PNW 591, *How to Reduce Bee Poisoning from Pesticides*. The booklet features a detailed table with much more information about common pesticides than the previous version. Dr. Hooven will discuss new features of the booklet, and discuss content and use of the tables. Most pesticide precautionary statements for bees cited are derived from acute (short-term) exposure experiments. However, in addition to short-term exposures while foraging, bees endure long-term (chronic) exposures to contaminated beeswax, stored pollen, and honey. Delayed or sublethal effects from these latter kinds of exposures could be very difficult to tie to a specific pesticide, and Dr. Hooven's research in this area will be discussed. Her laboratory has developed laboratory and field methods to chronically expose young adult bees to pesticide-

contaminated beeswax and pollen, in concentrations similar to those found in the field. Our laboratory experiments with revealed that contaminated beeswax may affect nurse bee and queen behavior. Our field experiments demonstrate that certain fungicides, including iprodione (Rovral), affect colony growth several weeks after initial exposure. These results suggest that chronic contact exposure through wax and ingestion of fungicides through pollen may target the development and social function of the colony.

You Are What You Eat: A Look at Honey Bee Diet Diversity

2:00 PM, Necanicum Room

Presenter: **Ellen Topitzhofer**, Oregon State University

My Master's project explores honey bee nutrition in the form of pollen diversity. We quantified the forage diversity in six major pollination crops of Oregon beekeepers: almond, cherry, blueberry, meadowfoam, radish seed, clover, and carrot seed. Then, we conducted an experiment that observes the protein utilization—from pollen to brood—in pollen diets of varying diversity. This study intends to provide a better understanding of pollen dynamics while honey bees are on the pollination track, and will lend insight into how we can keep our bees healthy and ready for the next contract.

Protecting Pollinating Bees

Pollination of Oregon Seed Crops: Honey Bees and Native Bees

1:15 PM, Pacific Room

Presenter: **Sujaya Rao**, Oregon State University

Agriculture in Oregon is unique in the great diversity of crops raised especially those raised for seed. Many of these require pollination by bees. While honey bees are the primary pollinator for many seed crops, native bumble bees also provide valuable pollination services. Pollination efficiency of honey bees and bumble bees vary with climatic conditions and characteristics of each crop. Dr. Rao will present her honey bee and native bee research experiences and share her perspectives on mutualistic interactions between Oregon seed crops and native bumble bees which she believes contribute to record crop yields and help sustain diversity and abundance of western bumble bee species.

Working Toward Treatment-Free Beekeeping

2:00 PM, Pacific Room

Presenter: **Dewey Caron**, Oregon State University

There are a number of ways of achieving treatment-free or minimally invasive chemical approaches to honey bee stewardship. Replacement of bees with demonstrated Varroa resistance often involves accepting heavy losses as a new locally adapted bee stock is built. This strategy might include judicious use of chemicals and supplements for maximizing bee nutrition. It is a continually evolving beekeeping management, but one that has many desirable benefits for bee and beekeeper.

Honey Bee Expert Panel (Topic To Be Announced at Conference)

3:15 PM, Pacific Room

Moderator: **Dewey Caron**, Oregon State University

4:00 PM **Closing**

Presenters and Others!

Gene Brandi purchased his first beehives in 1977, and currently operates with his son approximately 2,000 colonies for pollination, honey, and bulk bee production. He is past president of the California State Beekeepers Association (currently on the board of directors), on the American Beekeeping Federation board of directors (currently on the Executive Committee), past chair of the California and National Honey Boards, and is currently on the board of Project Apis m., the Almond Board Bee Task Force, and the Carl Hayden Bee Research Center Industry Liaison Committee.

Carolyn Breece is a research assistant at the Oregon State University Honey Bee Lab. She is also a committee member, Apprentice student, and mentor for the Oregon Master Beekeeper Program. She studied Biology at the University of Oregon and Forestry at Northern Arizona University. In addition to managing Oregon State University's colonies for experiments, she has a tiny, but hopefully growing, personal apiary that produced blue ribbon honey at the 2013 Oregon State Fair.

Dewey Caron, a Vermont native, learned beekeeping at Cornell University with mentor Roger Morse. He began teaching beekeeping in 1967 at Cornell University and continued 11 years at University of Maryland and 28 at University of Delaware. He retired in 2009 and moved to Tigard to be closer to his five grandchildren. Dewey continues to teach short courses and is a frequent speaker and newsletter contributor for Oregon and Pacific Northwest bee associations as well as beekeeping meetings in the US, South America, and Europe. He represents Oregon on the Western Apicultural Society Board, is Advisor to the EAS Master beekeepers, on the advisory committee of the Bee Informed Partnership, a member of the Oregon Master Beekeeper Program committee, and vice president of the Oregon State Beekeepers Association.

Bob Danka is a native of Pennsylvania who learned the research ropes at Penn State studying sublethal effects of an insecticide during apple pollination. Further graduate work at Louisiana State University brought the tremendous adventure of studying the behavior of Africanized bees as related to crop pollination. His career with USDA-ARS has included research on several other aspects of Africanized bees, some work on pollination of regional crops (blueberries, soybeans and cotton), and most significantly, work on genetic resistance of honey bees to tracheal mites and Varroa mites. His lab has defined mechanisms, inheritance, and distribution of honey bee resistance to tracheal mites. Most recently, he has helped to expand research on bees with VSH-based resistance to Varroa mites. This is a fascinating area because it involves everything from molecular genetics, through behavior and chemical ecology, to breeding for beekeeping functionality. A significant aim is to work with the industry to facilitate the development, transfer, and adoption of resistant bees by beekeepers. Bob notes that he finds it enormously satisfying both to be able to discover new things through research, and to be able to put some of these findings to practical use in our vital agricultural sector.

Keith Delaplane is Professor of Entomology at the University of Georgia and national director of the Managed Pollinator CAP program, which is in its final year. He recently completed a sabbatical at the National Bee Unit in the United Kingdom, where he conducted research on colony benefits of multiple mating in the honey bee queen.

Jordan Dimock started keeping bees in 1968 with two foul (i.e., dead) colonies and operated as a hobby/sideline beekeeper until 1991. In November of that year, he bought out a small commercial beekeeper and took up keeping bees full time. He presently runs between 5,000 and 6,000 colonies with Tamara, his wife of 34 years, and a great crew. The Dimocks have three daughters and two grandsons. Jordan also farms and gardens, and he enjoys fishing and hunting—time permitting.

Marion Ellis is Professor of Entomology and apiculture specialist at the University of Nebraska-Lincoln. He received BS and MS degrees in biology from the University of Tennessee in 1972 and 1974, respectively. He then served as a Peace Corps volunteer in Peru and El Salvador teaching apiculture at the Escuela National de Agricultura and offering educational workshops for beekeepers. After completing his Peace Corps service, he spent four years at Iowa State University working on controlled pollination of plant germplasm collections and 15 years as the Nebraska State Apiculturist. After 21 years of applied apiculture work, he returned to school and completed a PhD in Entomology in 1994 at the University of Nebraska, where he is currently a professor of entomology. He offers educational programs for new and experienced beekeepers. His research interests include bee diseases, bee parasites, and how bees are affected by toxins.

Susan Ellis says she is somewhere between an amateur and professional photographer, having most recently completed a series of photos for a book called *Lincoln Visions*, where she and her husband, Marion Ellis, live today. Her interest in photography dates back to childhood, but it seems she never had time to pursue it until 2007 during Marion's sabbatical to the south of France for six months to do honey bee research. She came back to the US and swore to be a better photographer on future trips. She has taken numerous classes and is a member of Lincoln Camera Club and Monday Photo Forum. She has won many awards at the local, state, and international levels. Although she describes herself as an eclectic photographer who loves to shoot anything and everything, her favorite subjects are her four grandchildren, all 4½ and under.

George Hansen had a short six-year career as a public school teacher, after which he transformed a hobby beekeeping operation into a commercial endeavor. With few resources and even less knowledge, the Foothills Honey Company was formed and became the sole source of livelihood for the Hansen family, George, his wife Susan and sons Matt and Joe. Starting from a few swarms and a collection of retrieved nuisance hives, the company now runs 5,000 colonies in three states. Although the name of the company never changed, the focus of the beekeeping is now primarily pollination service, with honey, wax, and bee sales making up no more than 30 percent of gross revenues. George is an active member of the beekeeping community, promoting the industry's interests as president of the American Beekeeping Federation and a producer representative on the National Honey Board. He hosts an annual Bee Day workshop and orientation at the Foothills Honey Company home site.

Pat/Russell Heitkam. Not available.

Louisa Hooven, After completing her studies in chemical carcinogenesis and earning a PhD in Biochemistry and Biophysics at Oregon State University, Dr. Louisa Hooven worked at the National Pesticide Information Center. Responding to public inquiries and concerns inspired her interest in the effects of pesticide exposures. She is currently researching the effects of pesticides on honey bees in the Department of Horticulture at Oregon State University. Under funding from the National Honey Board and California Almond Board, she is investigating the effects of pesticide-contaminated wax and pollen on colony health. She recently received USDA funding to examine the effects of nano-formulated pesticides on honey bees. She is the lead author on the revised PNW 591 publication, *How to Reduce Bee Poisoning from Pesticides*.

Brandon Hopkins received his BAE and MS degrees at Eastern Washington State University. His master's degree research emphasis was reproductive biology and his thesis focused on the cryopreservation of honey bee semen. He began his doctorate program at Washington State University in the fall of 2009 and plans to defend his doctoral dissertation in the spring. His research has been focused on field implementation of cryopreservation and improved above-freezing storage of semen. Future studies will investigate reproductive differences between honey bee subspecies and evolutionary lineages. He also currently serves as the research and apiary manager at WSU.

Jan Lohman began beekeeping in 1991 as a part-time beekeeper with Vince Vazza at Vazza Farms, Inc., and in 1994 sold her bookstore to help raise honey bees full time. Her passion in beekeeping is building nucs and requeening hives and watching them grow—there is nothing like it. Together, Jan and Vince manage 2,200 colonies in Eastern Oregon, which are moved into

pollination in the California almonds, then Oregon cherries, pears, blueberries, vegetable seed crops, melons, and finally buckwheat. She was president of the Oregon State Beekeepers Association for three years, secretary for three years, and a regional representative for several more years. Jan has two grown kids, Jason and Tammy, and three amazing grandkids from 6 to 18 years old. She is also on the Oregon Master Beekeeper Planning Committee and mentors and instructs students for the program.

Deb Morgan and her husband Bob have been raising honey bees for 35 years. They started out with 35 hives in 1977 and now average about 800 hives. They live on a 90-acre sweet cherry orchard in The Dalles, Oregon, where they raised four boys. With the boys now raised and married, they are proud grandparents of five granddaughters and one grandson. Deb loves dogs, and has five at the moment. She also enjoys her horse, gardening, rafting with her brothers and family, 4-wheeling, traveling when she can, and playing with the grandchildren.

Now approaching his 45th 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. Morris is also an active member and past president of the Lane County Beekeepers Association. Morris is an occasional contributor to *Bee Culture* magazine; his latest article, "Glass Jar Beekeeping," appeared in the May 2012 issue. Morris's 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, treatment-free bees using the Miller Method.

Sujaya Rao is a Professor at Oregon State University where she engages in teaching, research, and extension. She received a doctoral degree in Entomology from the University of Minnesota, and subsequently she was a postdoctoral researcher at the University of Delaware and at UC Berkeley. In her research, Dr. Rao has examined the behavioral and chemical ecology of pest species and of pollinator interactions in native habitats and diverse cropping systems. Her pollinator research has focused on native bees, especially bumble bees, and she has compared their pollination efficiencies and foraging behaviors with those of honey bees. Recently she received a Fulbright Scholar Award for studying native bee pollinators in Ecuador. Dr. Rao's educational programs have earned her the Distinguished Achievement in Teaching Award from ESA and the Hodson Alumnus Award from the University of Minnesota. She has also received local, regional, and national team awards for her collaborative research and educational programs. Dr. Rao has been active in the Entomological Society of America; she served as president of the Pacific Branch in 2012, and was elected to serve nationally as president of the Plant-Insect Ecosystems Section in 2014.

Sarah Red-Laird, Executive Director of the Bee Girl Organization, developed an affinity for honey bees from carefully watching beekeepers harvest honey when she was just three years old. Since then, she has worked with millions of honey bees, hundreds of kids, and dozens of beekeepers regionally and nationally to draw attention to the plights of our bees and how we can all be a part of the solution in their survival.

Hannah Ribotto is a graduate from Arizona State University with a Bachelor of Science in Communication. She works for Project Apis m. as the Communications Manager, managing all social media including facebook, twitter and youtube. She also is involved with speaking engagements, event scheduling and video production. Philanthropy, event coordinating and media are a few of Hannah's hobbies and she is loving her time at PAm where she is able to do all of those as part of her daily work.

After graduating from Klamath Union High School in 1997, **Andrew Richards** moved to New Mexico where he earned a Pharmacy Technician certification at Central New Mexico Community College. After working as a Pharmacy tech in New Mexico for eight years, he moved with his family to Eugene, and decided to go to Oregon State University. He is majoring in Food Science with a minor in Chemistry as well as working part time in the Honey Bee Lab. He would very much like to one day incorporate what he has learned in Food Science with what he has learned from working in the Lab by formulating new products that can supplement honey bee nutrition.

Gus Rouse. Bio not available.

Dr. **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. He has a Bachelor's and a Master's degree in Agriculture from A.P. Agricultural University, India. 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 state stake holders, i.e., both beekeepers and producers. He initiated the creation of the Oregon Master Beekeeper Program in 2010. 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.

Steve Sheppard, PhD, is the Thurber Professor of Apiculture and Chair of the Department of Entomology at Washington State University, Pullman, Washington. His areas of interest include population genetics and evolution of honey bees, insect introductions, and mechanisms of genetic differentiation. Steve, his WSU graduate students, and postdoctoral researchers have continued work on the genetics of honey bees, selection and breeding of honey bees for Pacific Northwest conditions, applied aspects of integrated pest management, and investigation of issues related to honey bee colony health. Since 2008, the bee research program at WSU has been instrumental in the importation of germplasm of three honey bee subspecies of apicultural interest (*Apis mellifera carnica*, *A. m. caucasica*, and *A. m. ligustica*) and developing improved cryopreservation technology.

Originally from Hudson, Wisconsin, **Ellen Topitzhofer** graduated from the University of Minnesota with a BS in Horticulture. Ellen subsequently joined the Oregon State University Honey Bee Lab under the direction of Dr. Ramesh Sagili. Her work explores the effects of pollen diversity on honey bee health and nutrition.

Thom Trusewicz is a hobbyist beekeeper. He spent a year reading about bees and beekeeping and worked with other beekeepers before attempting to manage his first colonies at his home thirteen years ago. He was a co-founder of the Clatsop County Beekeepers Association, and has taught an annual class for beginning beekeepers. He was the founder and editor of BeeKind, a beekeeping newsletter, and has authored several articles for newsletters and web publication. Presently he is the webkeeper of the Oregon State Beekeeping Association website (www.orsba.org) and does several presentations on beekeeping and Honey Bee Workshops for beekeepers and agricultural and service organizations every year all over the Pacific Northwest. Currently his apiary is dedicated to producing chemical-free (uncertified organic) honey and wax products. Unfortunately, supply cannot keep up with the demand for these pure products; however, there those are the sacrifices one must make to keep an enjoyable pastime from becoming a demanding profession.

Kenny Williams is Chair of OSBA's Endowment Committee. As past president from 2003 to 2006, he helped guide the Northwest Endowment for Honey Bee Research, Education, and Extension into being. Kenny and his wife, Heike, operate Wild Harvest Honey at Blodgett, Oregon.

Ciera Wilson has been working for the Oregon State University Honey Bee Lab for a year and has twelve hives in Hood River. For the past two years, her bees have pollinated the California almonds and the Columbia Gorge cherries and pears. Earlier this year, she went to California to help the Lab with sampling and pollen trapping in the almonds. She also went on research trips to Madras over the summer to continue with bee sampling.

OSBA Regional Representatives and Associations

REGIONAL REPRESENTATIVES

North Coast: Terry Fullan
39450 Northfork Rd, Nehalem 97131
503.368.7160; tfullan@nehalemtel.net

South Coast: Del Barber
PO Box 31, Ophir 97464
541.249.0160; mydedocs@charter.net

Columbia Basin: Bill Edwards
5051 Lost Lake Rd, Hood River 97031
541.354.2223; bfamily@live.com

Eastern Oregon: Jordan Dimock
2635 Mitchell Butte Rd, Nyssa 97913
541.372.2726

Portland Metro: Todd Balsiger
3284 Edgeview Ln, Forest Grove OR 97116
503.523.9572; toddbalsiger@comcast.net

Southern Oregon: Sarah Red-Laird (acting)

North Willamette Valley: Harry Vanderpool
7128 Skyline Rd S, Salem 97306
503.399.3675; shallotman@yahoo.com

South Willamette Valley: Jason Rowan
80881 Turkey Run Rd, Creswell 97426
541.942.6479; beetanical@q.com

REGIONAL ASSOCIATIONS

Cascadia Queen Breeders
Meets quarterly. Next meeting is November 1, 5:15 PM, Seaside Room, during the OSBA Fall Conference.
Chair: Paul Maresh
503.283.2060; pmaresh@spiretech.com

Central Oregon Beekeepers
Meets second Thursday, 63211 Service Rd, Bend
Visit www.orsba.org, Message Board, Central Oregon Branch. For information: contact@cobeekeeping.org
Ring Leader: Bindy Beck-Meyer

Coos County Beekeepers
Meets 6:30 PM, third Saturday (except December)
Ohlsen Baxter Bldg, 631 Alder St, Myrtle Point
For information: janeoku1958@gmail.com
President: Hal Strain

Klamath Basin Beekeepers
Meets 9:00 AM, last Saturday (except Nov/Dec)
OSU Extension, 3328 Vandenberg Rd, Klamath Falls
President: Jim Smith
541.892.5888; tulebee@gmail.com

Lane County Beekeepers
Meets 7:30 PM, third Tuesday, Trinity United Methodist Church, 440 Maxwell Rd, Eugene
President: Katharine Hunt
541.607.0106; keehhunt@gmail.com

Linn-Benton Beekeepers
Meets 6:30 PM, fourth Wednesday, South First Alternative Co-op Mtg Room, 1007 SE 3rd, Corvallis
President: Linda Zielinski
541.929.4856; llz50@peak.org

Oregon South Coast Beekeepers
Meets 6:00 PM, third Thursday, OSU Extension Office located at the Fairgrounds in Gold Beach.
President: Del Barber
541.249.0160; goldcoastapiary@gmail.com

Portland Metro Beekeepers
Meets 7:00 PM, second Thursday, Clackamas Comm College, Clairmont Hall, Room 118, Oregon City
President: Chris Heath
503.734.7662; tafdad@ccwebster.net

Portland Urban Beekeepers
Meets 6:30 PM, first Wednesday, Calaroga Terrace, Terrace Auditorium, 1400 NE Second Ave, Portland.
President: Tim Wessels
503.380.9381; president@portlandurbanbeekeepers.org

Southern Oregon Beekeepers
Meets 7:30 PM, first Monday, Southern Oregon Research & Ext Ctr, 569 Hanley Rd, Central Point
President: John Jacob
541.582.BEES; john@oldsolenterprises.com

Tillamook County Beekeepers
Meets 7:00 PM, second Tuesday, Art Space
Hwy 101 & 5th St, Bay City
President: Bob Allen
503.322.3819

Tualatin Valley Beekeepers
Meets 7:30 PM, last Tuesday, Cameron Public Svcs Bldg, 155 N First Ave, Hillsboro
President: Mike Van Dyke
503.642.5338; mvand581@gmail.com

Willamette Valley Beekeepers
Meets 7:00 PM, fourth Monday, Chemeketa Community College, Building 34, Room A, Salem
President: Richard Farrier
541.327.2673

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- Practical research guided by beekeepers, for beekeepers
- Best Management Program (BMP's)
- Funding three year PhD student in honey bee research
- Hose bibs for trucked colonies at CA border stations
- Amitraz studies for Section 3
- Effect of Pristine on honey bees
- Improved honey bee forage resources
- Purchased cryopreservation unit for WSU Germplasm Repository
- Purchased Nexcelom System at NCSU for queen and drone screening
- We are a non-profit, counting on your support!
- Visit our website at www.ProjectApism.org

Safe Travels Home, Everyone!