2013–2014 OVERWINTERING COLONY LOSS SURVEY OF OREGON BEEKEEPERS

Dewey M. Caron and Ramesh Sagili

The Bee Informed Partnership (BIP) has been documenting national honey bee colony losses over the past four years, and prior to that USDA/AIA documented colony losses for three years. The BIP survey pertaining to the 2013–2014 overwintering period reported a colony loss rate of 23.2 percent. This was a 7.3 point decrease from the 2012–2013 overwintering period survey, and a rate notably below the eight-year loss average of 29.6 percent. The national survey included over 7,100 beekeeper responses (95+ percent respondents were small-scale beekeepers), and these beekeepers collectively managed 21.7 percent of the total estimated U.S. colonies.

Parallel with the national surveys, initially Mike Burgett, then Dewey Caron, and now Ramesh Sagili and Dewey have sought to document bee losses incurred by Pacific Northwest commercial beekeepers using a paper survey sent out in late March. Small-scale beekeepers were surveyed by Dewey at regional bee meetings in April. This is a report of colony losses incurred by Oregon beekeepers based on the survey results. Results for the Pacific Northwest survey will be published later.

During the past six years, an average of twenty-five commercial/semi-commercial Oregon beekeepers have returned our mail survey. Twenty-three Oregon beekeepers responded to our 2013–2014 overwintering colony loss survey. During the past seven years, the number of bee colonies managed by respondents has averaged 47,926 colonies. For the 2013–2014 year, our colony representation was slightly above the average at 51,718 colonies. According to NASS, this number represents 83 percent of the total estimated honey bee colonies (62,000) in the state.

The twenty-three commercial beekeepers who returned our surveys had a weighted overwinter colony loss of 21.1 percent. This is slightly higher than the previous winter loss rate of 19.1 percent. Over the past six survey years, the commercial and semi-commercial beekeepers have on average experienced 22.2 percent colony loss. The loss range was from 5.5 percent of fall colony number to 50 percent. Figure 1 compares this season’s loss with past loss surveys.

Prior to the appearance of the two honey bee mite parasites, *Acarapis woodi* and *Varroa destructor*, in the mid- to late-1980s, beekeepers typically had winter losses of about 10–15 percent. The introduction of bee mites increased loss rates substantially—a ten-year study (1989–1998) of Pacific Northwest beekeepers by Mike Burgett reported an average annual ten-year loss rate of 22.6 percent among commercial/semi-commercial beekeepers, with rates trending upward over the ten-year period. It seems clear that overwinter losses in the 20+ percent range have been occurring for the past twenty-five years.

Colony losses of 307 small-scale (backyarder) individuals surveyed during this past spring were 48 percent, the highest level in six years of surveying (average for Continued on page 11
The Bee Line

MESSAGE FROM THE PRESIDENT

We consume a lot of fruit at our house, and I think this is true for many residents of Oregon. Right now we are in the midst of strawberries, which means my wife Mary is making freezer jam and freezing whole berries while I eat one of my favorites desserts, strawberry shortcake. Later this summer we will be processing other fruits, such as peaches and blueberries, for use later in the year. It is easy to take all this fresh abundance for granted when it is so readily available at the local farmers market or roadside farm stand. We also eat a lot of those almonds imported from California.

Many of these fruits, nuts, and berries are dependent on the honey bees that we supply to the agriculture industry and to the local environment. Our bees have a significant impact on the yields of these crops, which makes them more readily available throughout the country and at a very reasonable cost. Just within the last few weeks, I have seen several news articles warning that we are on the verge of risking the abundance of these items in our food supply, all because of the losses we in our industry have been suffering. In one of the recent articles I read, Dr. Jeff S. Pettis, USDA Agricultural Research Service, Beltsville, Maryland, said, “We truly are at a turning point with just barely enough bees and beekeepers to provide pollination services and I am not exaggerating when I say that we are just one poor weather event or high winter bee loss away from a serious disruption to our food supply.”

This places a burden on all of us in the beekeeping industry to make use of every method at our disposal to maintain the health and viability of our bees in order to be able to meet the needs of the agricultural industry we serve. I would say we need to double our efforts, but I know many of us already have.

Take care and stay healthy; meanwhile, I am going to have my strawberry shortcake!

Paul

ODA SUSPENDS LICENSE OF EUGENE COMPANY INVOLVED IN BEE DEATH INCIDENT

June 20, 2014

The Oregon Department of Agriculture has suspended the license of a commercial pesticide operator based in Eugene following an incident that has left an estimated 1,000 bees dead at a north Eugene apartment complex this week. The action taken against Glass Tree Care and Spray Service comes as ODA continues to investigate violation of the Oregon Pesticide Control Law. The company must comply with specific conditions before the license will be reinstated.

ODA’s investigation has found that an employee of the company applied a pesticide product containing the active ingredient imidacloprid on the grounds of the apartment complex earlier this week, including seventeen linden trees—the same tree species involved in bee death incidents last year in Oregon. The trees in the Eugene incident were in full bloom and attracting pollinators. Most of the pollinators impacted by the pesticide application were bumblebees. However, some honeybees were also found dead and dying following the application.

Last year, based on the high profile incidents of bee deaths, ODA adopted a required label statement on pesticide products containing imidacloprid and dinontefuran prohibiting the application of these products on linden trees and other Tilia species.

For 2014, labels on these products distributed into Oregon must state the restriction. Products with the old label are still in channels of trade and may be used, but not when plants are in bloom. Applicators using products with the older label are urged to follow the restrictions on the newly revised products. The product used in this case had an older label, which alerts the user that the product is “highly toxic to bees exposed to direct treatment or residues.”

Because of ODA’s extensive outreach and education regarding pollinator protection over the past year, the department believes that the pesticide applicator should have been aware of pollinator activity and should not have used the product in this case based on the label statement.

Glass Tree Care and Spray Service has been cooperative throughout ODA’s investigation.

Additional information about the incident is available at: www.oregon.gov/ODA/PEST/Pages/Pollinator.aspx.

In addition to reporting incidents on that page, ODA provides resources for pollinator protection.
EMERGENCY EXEMPTION FOR USE OF HOPGUARD® II

The Environmental Protection Agency has approved our request to amend the FIFRA Section 18 emergency exemption for use of hop beta acids to control Varroa mites in honey bee colonies during 2014 in Oregon, effective May 29–December 31, 2014. This amendment authorizes use of the new HopGuard formulation, HopGuard® II, manufactured by BetaTec Hop Products. Use of the new HopGuard® II product reduces the maximum number of applications from six to three. All application directions, restrictions, and precautions on the revised container label as well as all Section 18 use directions submitted with the request must be followed.

The EPA approval letter and the Oregon Section 18 use directions label for HopGuard® II are posted at: www.orsba.org. The label must be in possession of the user at the time of application.

BEE NEWS FROM COFFEE CREEK!

In April, our organization installed three bee colonies at the Coffee Creek Correctional Facility in Wilsonville. Since then, beekeepers and correctional facility personnel, including Bruce Roller, Bunny Cramer, Ann Murray, and Chad Naugle, have helped a group of very enthusiastic participants care for the hives. The new beekeepers were selected from a large pool of applicants based on their excellent performance at the prison and interest in the project. They have enjoyed classroom time and frequent visits to the hives, where each of them performs inspections and records updates in hive-management journals.

Each participant is currently pursuing Apprentice certification in the Washington State Master Beekeeper program. Afterward, many plan to apply to earn the Journey certification in Oregon. Karessa Torgerson is helping to coordinate the certification efforts.

Several news organizations published stories about the program, which led to a number of equipment and literature donations from beekeepers, including Kim Flottum.

We are excited to be a part of the rehabilitation of these inspiring women. If you are interested in helping to expand the program to a prison facility in your part of Oregon, please contact Chad Naugle at: chad.e.naugle@doc.state.or.us.

NATIONAL PESTICIDE CENTER INCREASES MOBILITY

People with questions about using pesticides correctly now can get answers on their smartphones and tablets, thanks to expanded online services offered by the National Pesticide Information Center (NPIC) at Oregon State University.

The center, which operates a national hotline, is growing its fleet of mobile apps, interactive content, video tutorials, and webinars for the medical community and state and federal regulators.

The efforts are funded by a five-year, $5 million grant from the Environmental Protection Agency. The NPIC has also launched four mobile-friendly apps. The most popular, the Pesticide Education and Search Tool (PEST), offers quick, bulleted information on more than a dozen common pests. The four apps aim to be immediately accessible to users and suggest alternatives to pesticides for common urban pests, like fleas, rodents and bed bugs.

The service also continues to add hundreds of pages and new services to its website, including a ZIP code-driven locator for emergency services. It is also beffing up its presence on Facebook, Twitter, Pinterest, and YouTube. The NPIC’s website and mobile apps can be found at: http://npic.orst.edu.

OSBA WEBSITE

Erin Olmon

The 2014 OSBA website survey has closed and the results are in. In general, people like website. They like the information available and the organization. The responses tell us that people are looking for an authoritative place to go to get information about bees in Oregon. As far as improving the site, the respondents indicated that they would like more information about beekeeping, especially in the form of photos and videos. We received some great ideas for articles and information to add to the site. Thank you everyone who participated in the survey!

WELCOME, NEW AND RENEWING MEMBERS!

Victor Berthelsdorf  Ada McClory  Jeff Shelby
Dan Brown  Marsha McCorkhill  Richard Temple
Mike Card  Michael Meador  Thom Trusewicz
Michael Carlson  Jacque Myers  Victor Vityuh
Dewey Caron  Chad Naugle  Dave & Diana
Gregg Everhart  Kat Nesbit  Wuertz
Susan Fichter  John Nyberg
Barbara Fitts  John Rockrohr
Daniel Fuller  Andrew Schwab
James Hensel  Stan Scotton
Melissa Kelley  Fawn Shelby
OSBA OFFICERS

President: Paul Andersen
19255 SW Prospect St, Aloha 97007
503.332.5410; paulande@easystreet.net

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

Secretary: Bunny Cramer-Carter
PO Box 779, Stayton 97383
503.703.8546; dbcramer@hotmail.com

Treasurer: Lynn Royce
30807 Decker Ridge Rd, Corvallis 97333
541.929.5337; mitebee@peak.org

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

OSBA REGIONAL REPRESENTATIVES

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

South Coast: Mureen Walker
25055 Pistol River Loop Rd, Gold Beach 97444
541.373.7010; mureen98@gmail.com

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 97116
503.523.9572; toddbalsiger@comcast.net

Southern Oregon: Sarah Red-Laird
PO Box 3257, Ashland 97520
541.708.1127; sarah@beegirl.org

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

* OSBA REGIONAL ASSOCIATIONS

Cascadia Queen Breeders
Meets quarterly. Contact the secretary for information.
Chair: Paul Maresh
503.283.2060; pmaresh@spiretech.com
Vice Chair: James Hensel
Secretary: Alvalea Fong
503.742.0910; mamagoose@mac.com
Treasurer: Rex McIntire
503.720.7958; remcintire_5@msn.com

Central Oregon Beekeepers
Meets 6:30 PM, second Thursday
Partners in Care, 2075 NE Wyatt Ct, Bend
Visit www.orsba.org, Message Board, Central Oregon Branch. For information and meeting details, email:
contact@cobeekeeping.org
Ring Leader: Bindy Beck-Meyer
Bookkeeper: Allen Engle
Website: www.cobeekeeping.org

Coos County Beekeepers
Meets 6:30 PM, third Saturday (except December)
Ohlsen Baxter Bldg, 631 Alder St, Myrtle Point
President: John Gardner—541.572.3847
Vice President: Shigeo Oku—541.396.4016
Secretary: Bobbie Gardner—541.572.3847
Treasurer: Jane Oku
541.396.4016; janeoku1958@gmail.com

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
Vice President: Doug Youngberg
dyoungberg@e-isco.com
Secretary: Cathy Vick
541.884.6274; elliott772@aol.com
Treasurer: Steve Vick
541.884.6274; stevevick@aol.com
Website: www.klamathbeekeepers.org

Lane County Beekeepers
Meets 7:30 PM, third Tuesday, Trinity United
Methodist Church, 440 Maxwell Rd, Eugene
President: Katharine Hunt
541.607.0106; keehunt@gmail.com
Vice President: Pam Leavitt—541.344.4228
Secretary: Jodi Wiktorowski
Treasurer: Polly Habliston
Website: www.lcbaor.org
Linn-Benton Beekeepers
Meets 6:30 pm, fourth Wednesday, South First
Alternative Co-op Meeting Room, 1007 SE 3rd, Corvallis
President: Linda Zielinski
541.929.4856; llz50@peak.org
Vice President: Steve Oda
541.745.7227; odafamily1@comcast.net
Secretary: Robert Williams
rober2w@gmail.com
Treasurer: Suzi Maresh
541.967.9607; sjomaresh@msn.com
Website: www.lbba.us

Oregon South Coast Beekeepers
Meets 6:00 pm, third Wednesday, OSU Extension Office
located at the Fairgrounds in Gold Beach
President: Carla Fletcher
Vice President: Jim Sorber
Secretary: Wayne Berry
berrydogs@gmail.com
Treasurer: Barbara Fitts

Portland Metro Beekeepers
Meets 7:00 pm, second Thursday, Clackamas Community
College, Clairmont Hall, Room 118, Oregon City
President: Joe Maresh
503.703.5060; joemaresh@bctonline.com
Vice President: Rex McIntire
503.720.7958; remcintire_5@msn.com
Secretary: Patty Anderson
503.887.7057; wiseacrefarms@me.com
Treasurer: Barb Derkacht
503.631.3063; bderkacht@yahoo.com

"Breeder and Shipper of Northern Calif. Italian Queens"

Wooten's Golden Queens, Inc

Top Quality Italian Queens
Now Accepting 2014 Orders
50 or more Queens $21.00 + Shipping

Our Involvement with Bee Informed
Tech Team ensures queens are top
quality & performs well in all
regions.

Shannon & Glenda Wooten
11189 Deschutes Rd
Palo Cedro Ca 96073
Tel (530) 549-3555
www.wootensgoldenqueens.com

Portland Urban Beekeepers
Meets 6:30 pm, first Wednesday, Calaroga Terrace
Rtmt Comm, Terrace Auditorium, 1400 NE Second
Ave, Portland. For information, email: officers@portlandurbanbeekeepers.org
President: Tim Wessels—503.380.9381
president@portlandurbanbeekeepers.org
Vice President: Bill Cathailer—503.572.6467
vice-president@portlandurbanbeekeepers.org
Secretary: Mike Card—971.207.9726
secretary@portlandurbanbeekeepers.org
Treasurer: Keith Gilman—503.830.3178
treasurer@portlandurbanbeekeepers.org
Website: portlandurbanbeekeepers.org

Southern Oregon Beekeepers
Meets 7:30 pm, first Monday, Southern Oregon
(6:30 pm hands-on demo at SOBA hives thru bee season)
Res & Ext Ctr, 569 Hanley Rd, Central Point
President: John Jacob
541.582.BEES; john@oldsolenterprises.com
Vice President: Ron Padgett
541.592.4678; padgett25@frontiernet.net
Secretary: Dana Rose—puckamok@yahoo.com
Treasurer: Cheryl Housden—541.955.5146
chousden@earthlink.net
Website: southernoregonbeekeepers.org
facebook.com/SouthernOregonBeekeepersAssociation

Tillamook County Beekeepers
Meets 7:00 pm, second Tuesday (except December),
Fresh Cafe, 9120 5th Street, Bay City
President: Bob Allen—503.322.3819
Vice President: Jim Fanjoy
503.637.5522; jim@fanjoy.com
Secretary: Jeffrey Hall
503.739.0893; jlh434@mac.com
Treasurer: Stan Scotton
503.232.4945; 4scotton@gmail.com

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
Vice President: Andrew Schwab
503.538.7545; beesbuzzin@gmail.com
Secretary: Paul Andersen
503.332.5410; paulande@easystreet.net
Treasurer: Jerry Maasdam
503.648.7906; jmaasdam@mac.com

Willamette Valley Beekeepers
Meets 7:00 pm, fourth Monday, Chemeketa
Community College, Building 34, Room A, Salem
President: Richard Farrier—541.327.2673
Vice President: Bunny Cramer-Carter
503.703.8546; dbcramer@hotmail.com
Secretary: Mike Rodia
503.364.3275; 46donnakay@gmail.com
Treasurer: Patricia Swenson—pkswenson@gmail.com
**REGIONAL NEWS**

### Regional Representatives

**South Coast**

Membership forms for OSBA were distributed by the OSBA regional rep, yours truly, to everyone in attendance for renewing and joining. Members were glad to get the forms so conveniently, and others expressed interest in supporting the state organization that can put forth the joined forces in voice and funding in support of beekeepers.

President Carla Fletcher asked for a report on the honey bee colony losses of the past year, eager for an official summary since reports from various areas range all the way from the best in many years to the worst, but the losses reporting deadline was extended a month to get more data.

Vice President Jim Sorber reported on catching a swarm that had taken up residence in an outside utility cabinet attached to the house of a couple who were very allergic to bees and had called the exterminator, Bug-e-Boyz, who called me.

From Coos County, Pattie Boice Strain reports that husband Hal’s log hive has “thrown” two swarms this spring. He caught both of them, keeping one and giving the other to Pat Reed, who also has a log hive. His has bees coming out the mouth of the carved face, with photos on his website: SolarBeez.com. A swarm arose from the CCBA Apiary and clustered in the middle of the parking lot. John Gardner came to the rescue with his bee vacuum.

Adding term limits to the bylaws for keeping the club dynamic was discussed. There was some favor for one-year term limits for president and vice president, allowing for re-election to the same position after a year “off.” The task of changing treasurers, with the legal paperwork involved, made a term limit of one year for that position burdensome. As to the job of secretary, it seemed unreasonable to even consider trying to replace. Elections are held annually.

Website organizer, Tamara Mitchell, has relocated and turned over the task to Mureen Walker and Barbara Fitts, OSCBA treasurer. Barb has uploaded the first document.

Carla Fletcher continues to treat the entire attendance at club meetings with a taste of a particular flavor of honey gathered from select blossoms. I dropped by the Stuck on Honey store in Reedsport and was intrigued by the brassica honey. Little Honey Bee cookies scattered over a plate of daisy cookies, decorated so that the four petals of the flowers matched the two wings of the bees, were the hit of the potluck sharing and networking portion of our meeting. The cookies were made by wife of Wayne Berry, secretary.

---

**North Willamette Valley**

I will add this one comment and it will probably be in duplicity as others will make the same remark: For me, this has been an almost unprecedented spring/early summer in regards to favorable honey bee weather. Knock on wood, but I predict a very good honey crop for Oregon beekeepers this year. I’ve noticed a fair amount of swarming this year; I can’t say from whose hives they are coming. Last week I packed off four that came within one week at my house, which makes for a total of seven swarms that flew right to my house.

I recently spoke to my cane berry farming relatives and they told me that the winter was severe enough to drastically reduce spotted wing *Drosophila* (vinegar fly) populations. For now, only monitoring is being done, and at least as far as they knew no one has sprayed for the fly and they certainly have not done it themselves. That’s really good news for honey bees near cane berries.

—Todd Balsiger

**Klamath Basin Beekeepers**

Klamath Basin Beekeepers had an educational booth at the Migratory Field Day, held in Klamath Falls, May 10. Katharina Davitt reported that the booth was well received, despite the cold weather. Honey tasting, children’s activities, and information about beekeeping in the Klamath Basin were featured.

The May meeting of the Klamath Basin Beekeepers featured two segments. Robert Clements, one of our backyard beekeepers, is presenting a regular segment in each of the meetings. His information is presented from the viewpoint of the amateur, backyard beekeeper, solving beekeeping problems using the tools he has available. This month Robert shared his personal tips and tricks in using a smoker. He uses a pine cone instead of burlap, cotton, or numerous other materials suggested.

The second segment of the meeting was a screening of “More Than Honey.” The film documents the seasons of a honey bee and discusses many of the current issues in beekeeping. It is beautifully filmed, has received good reviews, and comes highly recommended. Club members enjoyed the film and took away many thought-provoking ideas and issues in beekeeping.

We will have an educational booth at the June, July, and August Third Thursday celebrations in Klamath Falls. Katharina Davitt will organize the booth. She has organized many resources for use in the booth, including posters, honey sticks, buttons, and coloring books for children. Weather permitting, she will also have an observation hive for viewing.

---
June heralds summer in the Klamath Basin. This year brings a very dry summer, with limited irrigation, which can affect the “farmed” sources of nectar for the bees. Very little rain in all areas will also affect any natural resources for nectar. Members are keeping a close eye on these resources and planning for summer management with this information. Summer meetings of KBBA will include a field day at the OSU Klamath Basin Research and Learning Center and a BBQ for all members and families.

—Cathy Vick

Lane County Beekeepers

As mentioned last month, Morris Ostrofsky spoke about “Reading Frames” at our club during May. You are able to see his presentation slides and video recording at our website: www.lcbaor.org/Reference.htm. In June, Vice President Pam Leavitt took us on another journey inside the hive looking at “Honey Bee Pests, Pathogens and Diseases.” We are so fortunate to have club members who are willing to share their passion for bees.

We started to celebrate Pollinator Week, June 16–22, a little early as we hosted our annual Field Day on June 14. This took place at Jason Rowan’s place near Creswell. This was followed by our monthly meeting on Tuesday, June 17.

We will be entering a club display in the Grange section of the Lane County Fair June 23–27. Also we will be helping at the OSBA display during the Oregon State Fair on August 23. Club members have been encouraged to enter products of their hives in both fairs.

Club members have been busy this spring in our community. Jenny Buckley organized an interesting booth at the Wildflower Festival at Mt. Pisgah held May 18. She along with Becca Hale, Maggie Matoba, Max Kuhn, Judy Scher, and Larry Larson shared their interest in beekeeping and promoted our association with those who attended.

Recently, another member was featured in our local newspaper, The Register-Guard. On June 1, Jen Hornaday’s photo appeared in an article titled “A Bee-Haven Town.” She along with Doug Hornaday hosted a booth at BeeFest, which was organized by Beyond Toxics on Saturday, May 31. Jen gave out many samples of honey produced by bees in their Healthy Bees-Healthy Gardens program. This was another example of club members sharing their knowledge of bees in the wider community.

—Katharine Hunt

Portland Urban Beekeepers

Our June meeting held a panel discussion on natural/chemical-free beekeeping. The four panelists each shared their experiences and how they manage their hives. One does not treat or feed his bees. He raises “small cell bees” with the hope that the cell size might impede the growth of Varroa mites. Smaller bees also have a shorter gestation period and may stay one step ahead of the gestation period of the mite. Another panelist treats with the powdered sugar method using the bees’ natural grooming behavior to control mites. Still another uses a green drone comb that is replaced four or five times each spring. It is placed in the hive and when full of capped drone it is removed and placed in the freezer killing any mites in the cells. Whatever method is chosen, it is important to consistently test for mites, ensure good nutrition, and keep excellent records!

Our next meeting will be held on July 10 at 7:00 pm. We will feature a discussion on comb honey production and also discuss allergies.

—Patty Anderson

Portland Urban Beekeepers

It has been said that “the happiness of the bee is to exist. For man, it is to know and wonder at it.” This quote was made by Jacques Cousteau and set the stage for our monthly meeting focused on “bee science.” Experienced beekeepers don’t often subscribe to unsubstantiated observations and wild conjecture, but focus on “experience” and “science” when making decisions for their apiaries. With all the sources of bee information out there, it can be tough for new beekeepers to learn how to sort out the truth from fiction or the right way from wrong.

At June’s PUB meeting, our featured speaker was Ramesh Sagili, PhD, Department of Horticulture at Oregon State University. Dr. Sagili runs the Honey Bee Lab at OSU. He made a substantial presentation about research currently underway in the Horticulture Department and in particular, what exciting science is going on in the Honey Bee Lab. This overview covered the long-term projects and some of the shorter-term studies, and reminded PUB members why the continued success of the Honey Bee Lab is good for all beekeepers. The current science is certainly fascinating to new and experienced beekeepers. Where else do you get to see a researcher milk a bee of nectar without harming it or watch a bee be taught to associate the scent of coffee with feeding? Yes, the Pavlov technique works on bees, too.

June begins PUBs new fiscal year, and this means it’s open-season time. Anyone wanting to join Portland Urban Beekeepers may do so on our website at: www.portlandurbanbeekeepers.org. Our dues are $18 per year or $30 for a household. Where else can one get access to speakers like Dewey Caron, Ramesh Sigili, or Jacqueline Freemen for only $1.50 per month? At the time of this writing, Portland is nearing its peak nectar flow. It’s hard to believe that ripe fresh blackberries and juicy tomatoes are only weeks away.

—Michael Carlson
Tillamook County Beekeepers

More and more beekeepers. Tonight we hosted three prospective beekeepers with one of them having been around bees all her life but never actually working them. We discussed our club’s participation at the Oregon State Fair OSBA booth with several members wishing to participate. We’re hoping to have a few speakers on preparing honey for the honey tasting competition at our July meeting. Stan Scotton and Jim Fanjoy both received notice of a bee tree on Forest Service property on the south slope of Cascade Head that is broken and for safety needs to be partially removed. We discussed removing the bees, and it sounds like it might be more work than it is worth and also dangerous. A few of the club members are looking into it.

Swarming was on everyone’s minds as David Downs mentioned collecting half a five-gallon bucket of bees of a swarm from one of his own hives, and six of Scott Eckstein’s hives have swarmed with one swarming three times. Terry Fullan donated an unassembled super and five pounds of beeswax for a raffle. Emily Vollmer walked away with the hive, and Bob Allen was the winner of the beeswax.

A general discussion of beekeeping continued with topics such as best time of day and weather to do inspections and how often, the best ways to look for queen cells and identifying the different types, spraying sugar water along with or instead of using smoke, and a general discussion of becoming a beekeeper for our new attendees.

—Jeffrey Hall

KEEPING BEES IN JULY

Karessa Torgerson

What you do in July will have a measurable impact on your colony’s chance of winter survival. Bees raised after this month must endure the long, wet winter and still be strong enough raise a new generation early next spring. July is your opportunity to create ideal conditions for development of healthy winter bees!

❖ Plan your mite treatment. Monitor mite levels throughout the month so you know whether or not you need to treat. If numbers exceed threshold, don’t wait until August to deal with the problem. Many colonies have been lost to Varroa by mid-August in the past. Even if your numbers are low enough to wait, finish treatments no later than August 15 so your that winter bees are raised with minimal exposure to mites and mite-borne disease. If you are trapping for drones, you can continue trapping all the way through July, but be careful not to leave the frames in too long.

❖ Watch for Nosema. The “new” Nosema (Nosema ceranae) can be a silent killer. It doesn’t cause “streaking” like Nosema apis did, so your bees can be infected without your knowledge. If you have bees that appear healthy (without distorted wings or black, hairless bodies), yet are crawling on the ground in front of your hive or a hive that is failing to thrive for no immediately apparent reason, send a sample to OSU for testing in mid-July to find out if you need to medicate. Sometimes it can take a while to receive the lab results. Don’t procrastinate.

❖ Minimize heat stress. Provide plenty of ventilation for warm, moist air to leave the hive. Make sure the bees have a water source. If possible, give your colony afternoon shade during hot days.

❖ Watch for robbing. The blackberry bloom ends in mid-July for most of Oregon. This marks the beginning of robbing season. Reduce entrances on weaker colonies, especially if you suspect they are diseased. Marauders from healthy colonies can bring diseases back with the booty.
Avoid spilling syrup or honey near the hives, and keep hives open only as long as necessary. Keep a “robbing screen” on hand in case you need to stop a looting frenzy.

❖ Resolve queen problems. Queens are generally not available after the first week of August. It’s best to make colonies queenright now so they have time to collect themselves for winter. Recombine hives if necessary, but only if the colonies are not diseased.

❖ Assist swarmed colonies if necessary. In terms of summer population, colonies are weakest five-to-six weeks after they have swarmed. Reduce entrances, confirm the new queen is laying well, and combine swarmed colonies with other colonies if necessary. Be ready to feed swarmed colonies in August if they are light on stores.

It’s also time to plan for the honey extraction. In most parts of Oregon, colonies don’t put much honey away after July. You can remove honey supers at the end of this month without compromising your harvest. This allows you more time and flexibility for preparing the bees for winter.

❖ Reserve equipment now. It can be difficult to find available extractors at harvest time.

❖ Schedule a honey harvest party. Ply your guests with food and drink, and send them home with a jar of honey. They’ll never suspect they were your laborers for a day, and the process is much easier with many helping hands.

❖ Consolidate your honey supers as July progresses. Rearrange frames if necessary. Your goal is to minimize unprocessed nectar on the frames at harvest time. When you are ready to extract, give frames with uncapped cells a shake while holding them parallel to the ground. If nectar comes out, the frames are too wet to include in the harvest.

From: The Bee Line, July 2013.

Without Chemicals

Lynn Royce

Varroa mites are a serious problem for honey bees. The mites spend time on adult bees and reproduce inside capped brood cells. There is time during development of the bee pupa for mites to lay eggs that will hatch, grow up, mate and be ready to leave the cell with the young adult bee. In the time it takes a worker bee to emerge (post capping period), the average number of females mites that can develop from a single female is 1.3. The mother mite will also leave the cell. However, if the cell houses a drone there is more time for mite development so an average of 2.6 female mites can emerge. Because of both the mite development and attractiveness of drone brood, the beekeeper can place drone comb into a colony and remove it shortly after capping. These frames of drone brood can then be frozen to kill the mites and the drones, then thawed and replaced in the colony. The bees will clean out the dead drones and mites and the cycle can start over. Care must be taken to remove the drone brood before any drones emerge; otherwise, the mite population will be increased.

❖ OF ALMONDS AND THE BEES

The following exchange, sent by Carlen Jupe, California State Beekeepers Association, began with a request to Eric Mussen for comments on an article pertaining to the almond pollination problems with subsequent bee die-off. The article is at: www.motherjones.com/tom-philpott/2014/04/california-almond-farms-blamed-honeybee-die.

Eric Mussen: The article is based quite heavily on information that I shared with the author. While we are not certain how the bees are getting into trouble, when we ask a bunch of questions, the answers point to what was written in the article.

This year was a very nice year for pollinating almonds. Most every beekeepers’ colonies built up in the orchards and some made a bit of honey.

However, when some beekeepers came to the orchards to take their colonies out (at the tail end of almond bloom when no pollination really is taking place), they were shocked. Ten-frame colonies now contained only four–five frames of bees. Dead bees were all over the ground and hive bottom boards. I suspect that was the use of bee-toxic, delayed dormant sprays in some blooming, non-almond orchards.

Secondly, the beekeepers noted that the brood was severely damaged. No young brood was present and the brood that was trying to emerge was not colored as intensively as it should be. Many bees trying to emerge from their cells could not do so. Only their heads were sticking out, tongues extended. That is a typical consequence of exposure to a chitinase inhibitor-type of insect growth regulator. It appears that the combination of Tilt fungicide and Tourismo (two-part insecticide), probably mixed with
an adjuvant, caused serious damage to the brood in some cases.

Seventy-five beekeepers whose colonies suffered these losses met in Los Banos with EPA representatives to discuss the problem. An estimated 80,000 colonies were involved in these losses. Not only were the adult bees lost, but there would be no replacement bees for weeks. Beekeepers cannot tolerate those types of losses early in the year and a number said that they were not coming back to almonds next year. They cannot afford the losses.

**Additional Questions:** Was the pesticide/fungicide exposure normal or was it higher than normal? Given the drought conditions, is it possible that beekeepers left the colonies in the orchards longer than normal because of lack of good forage elsewhere? The reason I asked these questions is that a local beekeeper had mentioned that he had left hives in the orchard because he had a hard time finding a location with good forage to relocate the bees. The beekeeper stated that normally he would have moved his hives to the coastal region but there is almost no forage on his normal sites; he waited to move the bees until he found a suitable location in the Sierra Nevadas.

As far as “adjuvants” go, it appears that there is one that seems to be much more problematic, the name ends with 'silcon, I can't remember the full name. I could not find the item in question on the OMRI-approved material list for organic. I want to make sure we are not using any materials that may potentially harm the bees.

I am wondering if warmer than normal temperatures and drought caused bees to find water from nontraditional sources and perhaps were unable to maintain hive temperature due to lack of water. Is it possible that bees may have been sourcing water from drip irrigation whereas nitrogen or other materials are being applied with irrigation water? Is it possible that bees in the high die-off areas sourced water that may have been contaminated, such as spray rigs or hoses used for mixing or applying pesticide/fungicide?

**Eric Mussen:** The exposure to the adult-killing insecticide could have happened any year. Delayed dormant sprays can be very problematic. I believe they found Furadan in the dead bee samples (after almond pollination this year).

Beekeepers might hang around the orchards for two reasons: nowhere to go or because the grower wishes to see the bees, for which he has paid substantial money, stay in the orchard until the last
petal falls from the last blossom – there might be one last nut to set! This thinking is more prevalent than you might think and leads to a lot of bee problems.

The “organosilicone” adjuvants are the most effective in doing their job, but they may be too good for the sake of the bees.

Beekeepers have told me that things are worse the further west you go. It tends to be drier. And, no, we do not know where the bees went to get water. As more and more growers use something like drip irrigation to conserve water, they also tend to “chemigate” through the systems. If the systems are not perfectly intact, water and whatever else is in it becomes available to the bees. We saw the results of that on watermelon chemigated with imidacloprid. There was immediate damage and a surprisingly long period that could be described as “suspended animation” after the colonies were placed on fresh, clean food sources.

In early April, three winners were chosen to be the National best from the over 20 applications submitted. In first place was Hannah Falcone from Plainfield, New Hampshire with her essay entitled “Honey Bees: Colonizing the New World.” Second place went to Garret Smith from Starkville, Mississippi with his essay entitled “Beekeeping in Colonial Times.” In third place was Hailey Ordal, from Medford, Oregon with her essay entitled “This Land of Milk and Honey: How the Honey Bee Shaped America.”

The Foundation for the Preservation of Honey Bees, Inc. is proud to provide these talented 4-H essay winners with a monetary prize and the opportunity to have each paper published in the upcoming issues of the American Beekeeping Federation Newsletter.

Congratulations to all who submitted 4-H essays this year and especially to our National 4-H contest winners, Hannah, Graham and Hailey.

For the 2014 essay contest, the topic was Beekeeping in Colonial Times. To the earliest European settlers in the New World, honey bees were an important part of their existence. Cargo manifests show that honey bees were among the first shipments of animals. How were they shipped? Why were they important? Why were they so important to the colonists? How does that differ from today?

Overwinter Losses—Continued from page 1
the previous five years was 22 percent). Thirty-eight percent of backyard beekeepers reported 100 percent survivorship (no losses), but sadly 78 percent of backyarders lost 50 percent or more of their fall numbers. Colony loss for 86 percent of individuals was one, two, or three colonies. Compared to all the past survey years, the backyard beekeeper group has had the highest level of losses this past winter (2013–2014). Last year loss level was 42 percent.
In addition to the question regarding overwinter losses, Oregon beekeepers were asked to provide an estimate of an acceptable loss level. Among commercial and semi-commercial respondents, the median acceptable loss was 12–15 percent (range 5–25 percent), and among backyard beekeepers it was 15 percent (range 0–67 percent). In national surveys, 15 percent loss was indicated as an acceptable loss level.

Participating beekeepers were further asked to speculate on the reason(s) for their colony losses. Most of the beekeepers listed more than one reason. In the 2014 survey, ten (of twenty-three) commercial/semi-commercial respondents said queen failure (22 percent of total listings) was the major factor in colony losses. Six said Varroa mites and starvation (both 13 percent of total listings) were the next most likely factors listed for at least some of their losses. These three choices were followed by poor overwintering (11 percent of total listing), weak colonies and CCD (both accounting for 9 percent of total listings). Nosema, don’t know; pesticides and viruses were all under 7 percent. Small-scale beekeepers also listed queen failure (constitutes 21 percent of total listings), but it was second on the list after the option “colonies weak in the fall” (24 percent). Poor wintering and Varroa were listed nearly equally (15 percent) by backyard beekeepers. Pesticides and CCD were infrequently listed by backyard beekeepers (<5 percent of total listings) as reasons for their colony loss. A few of these respondents listed other factors, including virus, failure of chemical treatment, and yellowjackets as reasons for colony loss.

What does the most recent survey tell us? Oregon commercial and semi-commercial beekeepers continue to lose one in five colonies over the winter months. Oregon (and Pacific Northwest) commercial and semi-commercial beekeepers have experienced less than half the level of losses incurred by small-scale beekeepers. Oregon commercial beekeepers loss rate was very similar to the national loss level this year. In the previous surveys, their losses were lower (approximately 8–10 points) than the national survey. Current losses are similar in magnitude to the losses reported by Burgett for Pacific Northwest beekeepers during the years from the mid-1980s to the mid-1990s when beekeepers were first dealing with newly introduced mite problems.

Smaller-scale beekeepers continue to experience heavy colony losses. The reasons small-scale beekeepers have twice the losses compared to commercial beekeepers (with semi-commercial beekeepers intermediate in loss level) are not evident from survey responses. Management differences and efforts to rescue colonies and the practice of not managing weaker colonies by larger-scale beekeepers are likely factors for these differences in loss rates. Virtually all large-scale beekeepers reported that they would make up losses via splitting of successfully overwintered colonies to replace their losses. Smaller-scale beekeepers are either giving up in the face of heavy losses or starting over with package bees, by purchasing nucs, and/or capturing swarms.

It appears that evolving management practices have allowed the Oregon beekeeping industry to maintain sufficient colony numbers to service bee colony pollination requirements, including California almonds. Almond and tree fruit rentals constitute over 67 percent of commercial beekeepers income, though another dozen crop rentals contribute as well. Pollination rental income continues to be significant, representing over three-fourths of total

Snow Peak Apiaries
Custom Wood Shop
All types of supers, including 8-frame, Cedar top and bottom boards;
Frames—all styles
Custom cut to fit your operation
FRANZ & AUDREY YORDY
541.451.3752 34769 E Lacomb Dr
To free 1.877.530.5882 Lebanon OR 97355
commercial income (50 percent for sideliners, those with 50 to 500 colonies) for the year.

A SPECIAL THANK YOU to all of you who returned our 2013–2014 winter loss survey and/or participated in the national Bee Informed Partnership survey.

**BEEKEEPING IN “BEE-COPALYPSE”**

*Katharine Hunt*

I had the chance to hear George Hansen of Foothills Honey Company speak on this topic of “Beekeeping in ‘Bee-Copalypse’” at the University of Oregon’s 32nd annual Public Interest Environmental Law Conference, February 28. George, who is past president of American Beekeeping Federation, took part in the Pollinators and Industrial Agriculture panel. There were three others on the panel discussing not only bees but also birds, butterflies, and wild and native pollinators and how there are many factors contributing to the observed decline of some of the species. They noted that causes included habitat loss, pesticides, pests, pathogens, nutrition, climate change, groundwater depletion, drought, human development, and altered fire patterns. George noted that beekeepers have to replace 30 percent loss each year and re-new queens often. He also noted that mono crops and loss of traditional beekeeping regions, changes in agriculture, and spraying practices are all contributors to the plight of the pollinators.

**HONEY SHOW AT THE FAIR**

Reminder to Mark the Dates!

The deadline for entering products in the Honey Show at the Oregon State Fair, which is to be done online, is August 7. Entries are accepted at the Fairgrounds on August 9 and 10, noon–8 pm, and at off-site locations. See details at:


The fair runs from August 23 through September 1 this year.

Image on page 1 was sent by Mureen Walker. Perhaps we might call this a year of never-ending swarm season?

**Western Apicultural Society**

*Sept 17-20, 2014*

The University of Montana - Missoula

- **Sept 17** 2nd International Workshop on Hive & Bee Monitoring
- **Sept 17-20** WAS Conference - Updates on Research, Management, Bee Friendly Plants, Everything Honey, and More
- **Sept 18** Kyra Jean Williams Farm to College Fall ‘Feastival’ with dinner on the Oval (evening)
- **Sept 18-19** Main Conference Presentations & Trade Show
- **Sept 19** Banquet
- **Sept 20** Workshops - Candle Making to Queen Breeding (a.m.)
- **Sept 20** UM Color Run for the Fun and Exercise (a.m.)
- **Sept 20** Missoula Honey Harvest Festival on the UM Oval with additional opportunities (p.m.)

See it all on the website: ucanr.edu/sites/was2/Conference_Information or email Dr. Jerry Bromenshenk WASpresident2014@gmail.com

Image on page 1 was sent by Mureen Walker. Perhaps we might call this a year of never-ending swarm season?
MAGAZINE SUBSCRIPTIONS

Please use the form provided here, with current pricing information, to subscribe to American Bee Journal at the discounted rate offered. A discount form is no longer needed for subscriptions to Bee Culture.

ASSOCIATION MEMBER SUBSCRIPTION
(Rates listed below are 25% below regular rates.)

<table>
<thead>
<tr>
<th>Association</th>
<th>Oregon State Beekeepers Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriber’s Name</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
</tr>
<tr>
<td>State, Zip</td>
<td>Oregon 97383</td>
</tr>
<tr>
<td>Phone</td>
<td>503.703.8546</td>
</tr>
</tbody>
</table>

Return white copy to: American Bee Journal, 51 S. 2nd St., Hamilton, IL 62341

ASSOCIATION MEMBER SUBSCRIPTION
(Rates listed below are 25% below regular rates.)

- 1 Yr. - $20.25
- 2 Yr. - $38.25
- 3 Yr. - $54.00
- 1 Yr. - $34.25
- 2 Yr. - $66.25
- 3 Yr. - $97.00
- 1 Yr. - $43.25
- 2 Yr. - $83.25
- 3 Yr. - $120.00

UPCOMING EVENTS


August: Classes available from Bee Girl. For information or to register, visit: www.beegirl.org


September 17–20: Western Apiculture Society Conference. For information, visit: ucanr.edu/sites/was2/Conference_Info/Conference_Details/

November 6–8: OSBA Fall Conference. Seaside.

CLASSIFIED

900 6-5/8-inch supers: new, assembled, and painted; no frames; $10.50 each. 12-foot battery-powered Fruitel hive loader; $600.00. 541.990.1852

Biggest Beekeeping Store in the Northwest

Full Line Beekeeping Supplies Northwest Hive Kits On-Site Manufacturing Beekeepers on Staff Comprehensive Classes Consulting & Support Worldwide Shipping Hobbyist to Commercial Local Raw Honey & Beeswax

www.ruhlbeesupply.com
17845 SE 82nd Drive
Gladstone, Oregon 97027
503 657 5399
The Oregon State Beekeepers Association is a nonprofit organization representing and supporting all who have an interest in honey bees and beekeeping. Membership is open to anyone with an interest in bees and beekeeping. You do not need to own bees or reside in Oregon to join. Membership includes the ongoing work of the organization on behalf of the honey bee and beekeeping, a vote in OSBA elections, discounts on publications, placement on the swarm call list, three free ads on the website, and an annual directory and subscription to The Bee Line. For new memberships and renewals, please send check made payable to OSBA with this completed form to:

Lynn Royce, 30807 Decker Ridge Rd, Corvallis OR 97333

Name: ____________________________ Date: ________________

__ New __Renewing Company name: __________________________

Type: __Small scale (less than 25) __Sideliner (25-300) __Commercial (more than 300)

Additional name(s) for added memberships at the same address:

______________________________________________________________

Mailing address: _____________________________________________

City/State/Zip: _______________________________________________

Phone/cell: ________________ e-mail: _________________________

To share or not to share? We respect member privacy. Please indicate contact information to be included in a printed annual directory sent to OSBA members only:

Share the following: __ALL __NONE __Mailing address __Phone __e-mail

Name of local group, if member: ______________________________________

Membership: $40 per person ($50 per person outside the US) $___________

Voluntary contribution(s):
  General Fund $___________
  Research Fund $___________

Total amount enclosed: $___________

Thank you!

Effective Date: 1/1/2014
The Bee Line

The Bee Line is the official publication of the Oregon State Beekeepers Association. Annual subscriptions to the newsletter are included with each membership in OSBA.

Please send news about your bees and your experiences in keeping them, as well as events, corrections, comments, questions, photographs and stories (both from “old” times and “new”), interviews, recipes, and points of view to: Rosanna Mattingly, The Bee Line, 4207 SE Woodstock Blvd Ste 517, Portland OR 97206; email: osba.newsletter@gmail.com. It's your newsletter—we want to hear from you!

The next issue to be printed will be the August 2014 issue. The deadline for submitting copy is July 10, 2014.

Thank you!

Advertising

Per Issue

Event Listing
All events, space permitting (15 words) Free

For a nonprofit-group event, an additional 30 words (total of 45) in the listing or an article Free

Business Ad
Business card $10.00
Quarter page $25.00
Half page $50.00
Full page $100.00

Classified Ad (30 words)
Members $3.00
Nonmembers $5.00

This issue of The Bee Line is printed on recycled paper by Minuteman Press Powell; 503.234.2040.