Newsletter of the Oregon State Beekeepers Association

## Volume 36, Number 2

## March and April 2011



# **OREGON STATE UNIVERSITY POSITION IS FILLED**

Greetings!!! Hope all of you along with the bees are ready for the spring. I have accepted the tenure-track position here at Oregon State University for which I was interviewed during January 2011.

This new position will start from July 2011. I am very happy and excited to serve you in a more stable and long-term position. It was humbling to see the overwhelming and unwavering support of Oregon beekeepers and the Oregon State Beekeepers Association. I really feel fortunate to have your support. I want to extend my heartfelt thanks to all of you for your support and good wishes. I will strive to do what is important for the beekeeping community. With this new tenure-track position, I hope that we will have the opportunity to think and focus on long-term projects and not worry about the future every year. Also, I take this opportunity to thank all those who have been instrumental in getting this apiculture position back at OSU, that has been a long-time struggle and dream for many of you.

As you know, during the past two years we focused on projects such as statewide sampling for establishing a honey bee health baseline, honey bee nutrition, and several other applied research projects. We will continue these projects and plan to take on several other projects mostly involving applied research that would be beneficial for the beekeepers. I will provide you an overview of all the planned projects soon. Meanwhile, I encourage all of you to provide your input on issues that are important for you, so that I can plan studies accordingly. Regarding extension activities, I still plan to participate in as many bee activities and growers' meetings as possible throughout the state to address beekeepers, growers, and other stakeholders. Our Master Beekeeper Program, which is a joint venture between OSU and OSBA, is scheduled for launch in November. I hope it will serve as an important tool to address the needs of all audiences that are interested in honey bees. We also plan to make our existing honey bee lab website (http://honeybeelab.oregonstate.edu/) interactive and will post timely information that might be useful for the beekeepers. I am very confident that with your support we will be able to establish a dynamic and vibrant honey bee research and extension program at Oregon State University.

> Sincerely, Ramesh Sagílí

Image above: Good news for bees!

# **MESSAGE FROM THE PRESIDENT**

Well, we are back in the saddle again—at least it feels that way right now with my tired hands and sore back. Actually, bending over beehives makes a person feel about eight months pregnant! *(No joke!)* There are some benefits to being short when working a hive.... I was thinking about what we do in a day that we never think about. Do you hold your breath when the smoker is too strong? Do you hold your breath when you are tying down a truckload of bees in the dark? Yep, me too! Throughout the day while we work bees, we talk about food—what we had for dinner, what we are having for dinner, and when is the next snack! The weather in California was amazing this year before the bloom. For the most part, the bees in the Pacific Northwest seem to have come through the winter in good shape. For those beekeepers with problems, our hearts go out to you. There is nothing more depressing than cleaning out dead equipment.

There is so much going on in our bee world. A huge thank you to Mike Rodia and Fred Van-Natta for their participation with the legislature at a hearing to determine if Oregon should adopt "standards of purity" for honey. On February 9, Bill 2947 was sent to the floor of the House of Representatives with a Due Pass recommendation by a unanimous vote by the House Agriculture and Natural Resources Committee to adopt standards.

We welcome a new treasurer to the OSBA. You will see his introduction in another section of *The Bee Line*. I would like to thank Paul Kowash for volunteering for this very important position and for giving Herb Brasington a well-deserved break.

We are working hard to get our OSBA Directory ready for print. I know that you will enjoy using it.

Now, after many months of work, we have received notice that both of the Varroa treatments we applied for have been approved. The Mite-Away Quick Strips<sup>™</sup> from NOD Apiaries were approved with a full registration; the strips should be available shortly. We also received notice from the Oregon Department of Agriculture that the HopGuard<sup>™</sup> Section 18 was approved for use in Oregon, Washington, and Idaho.

I am welcoming a familiar face to a new position at Oregon State University. Dr. Ramesh Sagili has been offered the tenure-track position for honey bee health at OSU. I personally would like to thank OSU for their thoughtfulness in including beekeepers and stakeholders on their search committee. We will include interviews with Dr. Sagili and Carolyn Breece, his assistant, in *The Bee Line* as soon as possible.

This year is beginning with a bang, and finally many great things are happening in the beekeeping industry. Take care of yourselves, your families, and your bees—and keep in touch.

Jan

# **PESTICIDE POISONING IN 2010?**

## Jimmy Klick

I'm a PhD student writing a research paper/extension publication for a Honey Bee Biology class with Ramesh Sagili about honey bee insecticide exposure since the introduction of Spotted Wing Drosophila and Brown Marmorated Stink Bug. The recent introduction of these pests has warranted increased neonicotinoid, organophosphate, and pyrethroid applications. I'm wondering if Oregon beekeepers experienced an unusual increase in honey bee pesticide poisoning in the 2010 season and if they would answer the following questions: (1) Have you experienced an increase in honey bee pesticide poisoning in the 2010 season? (2) If yes, describe the signs/symptoms, what pesticides were applied (if known), the number of colonies affected, and why bees may have been exposed to pesticide poisoning. (3) If no, what preventative measures were taken or how was poisoning avoided?

It is okay to remain anonymous. If possible, please indicate the county, regardless of poisoning. Send to: klickj@hort.oregonstate.edu. Thank you!

# Oregon State Beekeepers Association EXECUTIVE BOARD MEETING

Canby, Oregon 🛠 January 10, 2011

**Attendees**: Bob Allen, Paul Andersen, Carolyn Breece, Tom Chester, Bill Edwards, Jan Lohman, Jason Rowan, Chuck Sowers, and Harry Vanderpool

President Jan Lohman called the OSBA board meeting to order at 2 рм.

# Minutes

The minutes of the October Executive Board Meeting were read by Carolyn Breece, secretary. Minutes were approved as printed in *The Bee Line*.

# **Treasurer's Report**

Paul Andersen reported for the treasurer, Herb Brasington, who was unable to attend the meeting. Paul read the balance of the checking and money market accounts. As of December 31, 2010, OSBA has \$46,397.89. Discussion followed regarding how to best invest the funds in the money market account; however, no decision was made. Keeping the balance at \$20,000 ensures that the association has emergency funds, if needed. Paul then read through OSBA income and expenses. Bob Allen made a motion to accept the treasurer's report, and Jason Rowan seconded the motion.

# Announcing New Treasurer!

Herb has given many hours of service to OSBA as treasurer and would like to have someone else assume the position. Jan asked Paul Kowash, a retired auditor and OSBA member, if he would be interested in serving as treasurer. Paul agreed, and Jan has officially appointed him as OSBA treasurer. Herb will assist in the transition, which will occur by April. Please welcome Paul at the next OSBA board meeting in April. Many thanks to Herb for his efforts as OSBA treasurer.

# Webmaster

Harry Vanderpool, Herb Brasington, and Thom Trusewicz will meet and create a Webmaster Team. Forming a team will allow multiple people to know and understand the website and thus lighten the load of any one person.

# 2011 Membership Directory

The last OSBA membership directory was printed 3–4 years ago. Rosanna Mattingly will update the directory and send it out when complete. OSBA board members would like the directory updated once a year. Additional suggestions for the directory include the OSBA constitution, bylaws, policy statements, and the list of Honorary Life Members. The board would like to compensate Rosanna for her work on the directory and suggested a yearly stipend of up to \$500. Bob Allen motioned to accept this authorization, and Paul Andersen seconded the motion.

# The Bee Line

How do you enjoy the bounty of your bees in home cooking? Jan suggested a recipe column for *The Bee Line*. Please submit your favorite recipes containing honey to Rosanna. Also, please don't forget to submit your questions for Dr. Dewey Caron and Dr. Ramesh Sagili for the Question-of-the-Month column.

# **Regional Representative Reports**

**Columbia Basin**: Bill Edwards is helping a couple of young beekeepers (ages 14 and 16) get started in bees.

North Willamette Valley: Harry Vanderpool stated that this is the best honey year in at least five years! Hives are still heavy, and bee populations are good. He suspects that this year we'll see the lowest losses ever. WVBA will have a bee school in Salem on February 17, 22, and 23. There will also be a half-day field day. Please see the OSBA website for more details.

**South Willamette Valley**: Jason Rowan reports a favorable fall. The hives still have a nice weight, and there are no noticeable deaths. Looks like we have a good year ahead!

# **Regional Association Reports**

**Klamath Basin**: Tom Chester said the group is building and now is up to about fifteen people. They are nearly ready to launch a website. A bee school is scheduled in March and the group is inviting speakers to their meetings.

**Tillamook County**: Bob Allen said they continue to have a small group of regular meeting attendees and hope to get more.

# Oregon State Beekeepers Association EXECUTIVE BOARD AND RESOURCES



# **OSBA OFFICERS**

**President:** Jan Lohman 77225 Colonel Jordan Rd, Hermiston OR 97838 541.567.3209; 541.980.0304 (cell) vazzafarms@yahoo.com

Vice President: Paul Andersen 19255 SW Prospect St, Aloha OR 97007 503.649.5089; 503.332.5410 (cell) paulande@easystreet.net

Secretary: Carolyn Breece 743 NW 18th St, Corvallis OR 97330 541.207.3668; 541.224.2859 (cell) carolyn\_breece@yahoo.com

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

Past President: Chuck Sowers 26730 S Hwy 170, Canby OR 97013 503.266.1740; sowers@canby.com

## \* OSBA REGIONAL REPRESENTATIVES

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

South Coast: Open

**Columbia Basin:** Bill Edwards 5040 Lost Lake Rd, Hood River 97031 541.354.2223

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

Portland Metro: Bev Koch 20495 S Geiger Rd, Oregon City 97045 503.655.7447; johnbev@aracnet.com **Southern Oregon:** Floyd Pawlowski 415 Pompadour Dr, Ashland; 541.482.4797 fmpawlowski@ashlandwireless.net

North Willamette Valley: Harry Vanderpool 7128 Skyline Rd S, Salem; 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

Central Oregon Beekeepers

Meets 6:30 PM, third Tuesday 63211 Service Rd, Suite 130, Bend **President:** Dennis Gallagher; 541.389.4776 For information, please contact John Connelly johncobka@gmail.com

## **Coos County Beekeepers**

Meets 6:30 PM, third Saturday (except December) Ohlsen Baxter Bldg, 631 Alder St, Myrtle Point **President:** Shigeo Oku; 541.396.4016 **Vice President:** John Gardner; 541.572.3847 **Secretary:** Bobbi Gardner; 541.572.3847 **Treasurer:** Jane Oku; 541.396.4016 jane\_oku@hotmail.com

## Klamath Basin Beekeepers

Meets 9:00 AM, last Saturday (except Nov/Dec) OSU Extension, 3328 Vandenberg Rd, Klamath Falls **President**: Tom Chester; 541.850.8384 klamathbeekeepers@gmail.com **Vice President**: Jim Smith; 541.892.5888 **Secretary**: Donna Schmerbach; 541.891.3066 **Treasurer**: Ed Geise; 541.892.6016

## Lane County Beekeepers

Meets 7:30 PM, third Tuesday, Trinity United Methodist Church, 440 Maxwell Rd, Eugene **President:** Judy Scher; 541.344.2114 judy\_scher@catdreams.com **Vice President:** Rita Ostrofsky; 541.685.2875 **Secretary:** Barbara Bajec; 541.767.9086 **Treasurer:** Nancy Ograin; 541.935.7065 woodrt@pacinfo.com **Website:** www.lcbaor.org

## **Portland Metro Beekeepers**

Meets 7:00 PM, second Thursday, Clackamas Comm College, Clairmont Hall, Room 118, Oregon City **President:** Nancy McFarlane; 503.260.3930 nancymariemcfarlane@yahoo.com **Vice President:** John Keeley; 503.632.3682 keeley81@bctonline.com Secretary: Bernard Newland; 503.656.6621 berternew@yahoo.com Treasurer: Rex McIntire; 503.720.7958 remcintire\_5@msn.com

#### **Southern Oregon Beekeepers**

Meets 7:30 PM, first Monday, Southern Oregon Res & Ext Ctr, 569 Hanley Rd, Central Point **President:** John Jacob; 541.582.BEES john@oldsolenterprises.com **Vice President:** Floyd Pawlowski 415 Pompadour Dr, Ashland; 541.482.4797 **Secretary/Treasurer:** Jonathon Boulton jonnyboulton@hotmail.com **Website:** www.southernoregonbeekeepers.org

#### **Tillamook County Beekeepers**

For meeting and other information, please contact **President:** Bob Allen; 503.322.3819

#### **Tualatin Valley Beekeepers**

Meets 7:30 PM, last Wednesday OSU Ext, #1400, 18640 SW Walker Rd, Beaverton **President:** Kevin Beckman; 503.539.5996 kevin\_beckman2@msn.com **Vice President:** Herb Brasington; 503.701.4180 herb@hwbsystems.com **Secretary-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:** Harry Vanderpool; 503.399.3675 shallotman@yahoo.com **Secretary:** Mike Rodia; 503.364.3275; drodia@yahoo.com **Treasurer:** Patricia Swenson; pkswenson@gmail.com

#### **COMMITTEES**

Agriculture Liaison: Harry Vanderpool; 503.399.3675

Fairs and Exhibits: Marjie Ehry; 503.434.1894

NW Apiculture Fund for Honey Bee Research, Extension, and Education: Kenny Williams; 541.456.2631

Nominations: Chuck Sowers; 503.266.1740

Public Relations: Paul Andersen; 503.332.5410

## HONEY BEE RESEARCH

Dr. Dewey Caron 302.353.9914 (April–October) carond@hort.oregonstate.edu

Dr. Lynn Royce 541.929.5337; mitebee@peak.org

Dr. Ramesh Sagili 541.737.5460; sagilir@hort.oregonstate.edu

## **REGIONAL NEWS**

## Regional Representatives Portland Metro

January was fairly quiet with only a couple of phone calls from people wanting to know where to purchase honey bees and from another wanting to know more about HB 2947, the Honey Labeling and Standard of Identity bill. In February, I had one e-mail question about bee schools and another requesting a beekeeper for a presentation; both were resolved. The influx of folks wanting to keep bees seems to be continuing as memberships in the area branches continue to grow. Folks are ordering bees and now waiting for warmer weather. —Bev Koch

## North Willamette Valley

The Willamette Valley Beekeepers Association held its four-day bee school in February. There were 108 in attendance on the first night, including instructors. Students were very engaged and eager



to learn and get started. Many new friendships were made there. Beekeepers have reported that they are very pleased with the conditions of their hives that overwintered. Those with hives pollinating almonds have shared a sense of relief with their growers over weather conditions that gave needed windows for bee flight throughout the season. Good supplies of pollen and nectar shake out are being reported. While there is concern over a tight supply of early queens, there will be no shortage of bulk bees in most operations.

—Harry Vanderpool

## South Willamette Valley

Favorable weather and proper management led to low losses this winter. Beekeepers have reported losses not unlike premite years. Now, couple that with lots of rain this previous year, and beekeepers' hopes are high for a great honey year—if all goes well. Look out for swarms this spring as long as the rains and temperatures are moderate. Most south valley commercial beekeepers are down in the almonds where the weather seems to be sticking around upper 60s/low 70s. South valley hobbyists should see increasing comb layout, so check honey stores for light hives. On a personal note, my

wife and I have had our first child *Eva Rose Rowan*, born on December 6.

The March weather in the south valley has been playing with the area's beekeepers. Warm and lovely temperatures in January/February now have given way to deep freeze and snow. After checking some of our hives, we found they pulled through just fine, but be aware of weight-to-colony size as things could change at any time. For the hobbyist beekeeper, make sure your hives are protected from the rain and check weight from here on out. The queens have been laying for at least a month, taking a break when the weather turns cold, but spring is coming so you better get your boxes made. On the commercial side of things, I just returned from California where temperatures were around 70°F and not a cloud in the sky. The bees seemed to be enjoying peak bloom with plenty of shake out evident. Not long from now, the bees will return. Hold onto your hats! I have a feeling this season's swarm conditions may coalesce into a right dandy season. Happy keeping. —Jason Rowan

## Regional Associations Lane County Beekeepers

On Saturday, March 5, we held our annual bee school. Seventy-five attendees, mostly first-year beekeepers, were present. Our evaluation feedback was very positive.



Clockwise from upper left: Morris Ostrofsky, Ken Ograin, Brandt Weaver, and Max Kuhn share the ways of bees and how to keep them.

Just like last year, the talks included an introduction to beekeeping by Chuck Hunt, equipment by Barbara Bajec, packages and handling bees by Jonathan Loftin, spring management by Morris Ostrofsky, and fall management by Judy Scher. Demonstrations on wooden ware assembly and feeders were given by Ken Ograin, Brandt Weaver, Max Kuhn, and Morris and Rita Ostrofsky. The bee school is our major fundraiser. —Judy Scher

#### **Portland Metro Beekeepers**

In January, we welcomed several new members and prospective members. We elected officers for 2011, and learned that a recent audit declared our accounting methods fine and the treasury safe. We discussed the issue of Bayer CropScience's neonicotinoid pesticide, clothianidin, and its possible connection to Colony Collapse Disorder. The club's constitution prevents it from taking a role in lobbying state legislators, but individual beekeepers may do as they wish.

Dr. Sagili's research data from the sampling conducted last fall are now available at: http://honeybeelab. oregonstate.edu/view/2010 results. Club members Bill Zuber and Mike Sperber attended the recent North American Beekeeping Conference and Tradeshow in Galveston. Bill said that about 1,200 people were there, with seminars that included plenty for *sideliners*, as beekeepers with 1-40 hives are called. Next year the conference will be held in Las Vegas. Nancy McFarlane gave a brief a brief description of the upcoming bee day, and we discussed winter feeding-which brought up Kerry Haskins' candy board method and recipe. As is customary at the start of the year, we brainstormed topics for the year's meetings. Our officers will schedule the selected topics for maximum relevance to the beekeeping activities at the time of each meeting.

In February, John Keeley reminded us that winter bees live 6–8 months and we can prevent starvation in spring. Open the hive when the temperature is at least 50°F. Quoting Bill Ruhl, "If you don't talk to your bees, they won't talk to you." Look for some brood production to check on the queen. Look for mites and treat with the variety of methods available. They may need protein patties. If using sugar syrup to feed, use a two-parts-sugar-to-one-part-water solution. Brandy and Zack from Ruhl Bee Supply brought a variety of items for us to see and also talked about their classes. We will have a booth about beekeeping at this year's Spring Garden Fair at the Clackamas County Fairgrounds in Canby, April 30 and May 1.

During our March meeting, Bernie Newland went over what to do from March to June. This included not looking for your queen until the temperature gets to 65°F. Some people feed pollen patties now for more complete nutrition. Bernie mentioned Dr. Sagili's idea of using a chicken waterer with a sponge around the trough to provide water later in the summer. Be careful with systemic pesticides in your garden, and make sure you get your new bees from reputable sources to avoid bringing in diseases. Kerry Haskins did a clear demonstration of ways to install nucs and packages of bees. He also described several different ways to introduce the queen and how to tell if the queen is being rejected by the colony. Glen Andresen will discuss preventing and catching swarms at our April meeting.

—Paul Jarrett and Others

## **Tillamook County Beekeepers**

President Bob Allen opened the February meeting at Art Space at Hwy 101 & 5th St in Bay City. The main focus was discussion of our bee orders for this year. Further talks covered designs for structures to cover bees out of the coastal rainy season. We also touched on Varroa treatments and the new products of Mite-Away Quick Strips<sup>™</sup> and HopGuard<sup>™</sup>.

Trisha Kauffman would like to have our club meet for a dinner using honey in many of the dishes and desserts. The meeting ended with a delicious ginger cake that was enjoyed by all. We are a small group at this time and welcomed one new member, Jim Fanjoy, who has just returned from the Peace Corps and is starting beekeeping. —Terry Fullaw

# **UPCOMING EVENTS**

## Saturday, April 16: Oregon Master Beekeeper Instructors' Conference

# The date of the Instructors' Conference has been changed!

Please mark your calendar for Saturday, April 16, from 9 AM to 5 PM at the Oregon State University campus. We will send more details via e-mail. If you are interested in being a Master Beekeeper instructor and/or mentor and haven't signed up, there's still time! We are requesting that instructors have a minimum of three years of experience keeping bees, have some experience giving presentations about bees, and be an OSBA member. Please contact Carolyn Breece at breecec@ hort.oregonstate.edu or Rita Ostrofsky at ostrofsky@ pacinfo.com for an application form.

# Saturday, May 7: Bill Ruhl Memorial Bee Day

Using live-hive demonstrations, we will have presenters using organic and traditional techniques with a beginner's track and a track for intermediate beekeepers. This popular event is growing each year and is a very useful introduction to beekeeping as well as a source of new ideas for the more experienced. It is held at the Hansens' Foothills Honey apiary in Colton. Join us for a great day of "bee wise and bee fun." For information and to sign up, contact Nancy McFarlane at 503.260.3930 or Rex McIntire at 503.720.7958. Cost this year, if preregistered, is \$20 for individuals and \$30 for family.

# DONATIONS TO THE ENDOWMENT FUND

- Make your check out to: OSU FOUNDATION
- On the memo line, take care to write: THE NORTHWEST APICULTURE FUND FOR HONEY BEE RESEARCH, EXTENSION, AND EDUCATION
- Mail to: Oregon State University Foundation at 850 SW 35th St, Corvallis OR 97333-4015

If you have any questions regarding details of the fund or how to donate, please contact Kenny Williams, Chair of the OSBA's Endowment Fund, at 541.456.2631.

**IMPORTANT:** Making your check out only as described above ensures that your donation is correctly applied to the appropriate Endowment and not to any other program.



## Saturday, June 4: WSU Art of Queen Rearing

This class is taught by Sue Cobey and is a golden opportunity to receive the same training locally as at UC Davis. It will be held at Half Moon Farm, 14737 159th St, Brush Prairie WA. The cost is \$125, the same cost as her class in California. For information, contact Charles Bennett at cbennett3491@comcast. net or call 360.566.0455/360.200.3093. To register, send name, address, phone, and e-mail address with a check made payable to *WSU Entomology* to: Barb Smith, Department of Entomology, Washington State University, BLDG FSHN 166, PO Box 646382, Pullman WA 99164-6382.

## Pollinator Week: June 20-26, 2011

Make plans now to create and support outreach events for your area. For resources and information on planning and posting events, as well as to see what events may be in the works, visit: www.pollinator.org.

**Note**: In 2009, I sent a version of the letter that appears at www.pollinator.org to the governor of Oregon to request that Oregon participate in National Pollinator Week. I quickly received the proclamation of Oregon's participation. I (and likely others) did the same in 2010, yet never heard back; Oregon was never declared a participating state. I recently sent a request for Oregon's participation in 2011. If others have and do the same, with many requests, surely it will happen this year. It takes only a moment; yet, declared or not, may pollinator events take place throughout our fine state!

# Thursday–Saturday, November 17–19: OSBA Fall Conference

This year's fall conference will take place Thursday evening/all-day Friday and Saturday at the Seaside Convention Center in Seaside. Mark the date!

## **KEEPING BEES IN MARCH & APRIL**

## Todd Balsiger

February and August historically have been the two months on the opposite sides of the nectar flow to treat for Varroa mites in Oregon, but this is not written in stone. In a nutshell, we do not want our Varroa mite populations to get too high—3,200 is cited as the economic threshold for the United States. The need to treat should be based on the current mite population. If you have a high mite population, you should treat immediately. If you have a low mite population, you can delay and treat in March or April with controls that require shorter withdrawal times before supering but higher daily high temperatures for use. Consider also extending the period with IPM strategies such as mitetolerant stock and screen bottom boards.

Other tasks, aside from worrying about Varroa mites, are as follows:

- Heft hives to find any light ones. Provide light hives emergency feed, preferably sugar candy/fondant or frames of honey. This is prime time for starvation, as brood production increases energy demands. When daytime highs exceed 55°F, Fumagilin-B medicated syrup can be used instead of fondant or frames of honey. You can transfer excess frames of honey from overly heavy colonies to lighter ones.
- If you feel your area lacks sufficient natural nectar flows and pollen to fuel high-energy growth to make full-sized production colonies in time for the main nectar flow (late May), feed pollen substitute as well as medicated syrup when the daily highs exceed 55°F.
- Remove mouse guards.
- Always scan brood frames for the presence of foulbroods, particularly for American foulbrood. Tylosin provides up to four weeks of protection from foulbrood with a single treatment, but it is much more persistent and requires a longer withdrawal period before supering than Terramycin. There is a growing problem with Tylosin being detected in US honey. Tylosin is not to be used prophylactically (preventatively).
- Continue to look for signs of Nosema-infected hives. Symptoms include slow buildup (the best indicator), disjointed wings, distended bloated abdomen, and a lot of yellow streaks on the outside of the hive with crawling bees outside also. These symptoms may also be associated with tracheal mites, but maybe without the yellow streaks and distended abdomens. Make sure that suspect hives have good ventilation and treat with Fumagilin-B medicated syrup. (Follow the directions exactly.) Effects of Nosema include reduced bee life spans, increased supercedure and colony death, slow spring buildup, and reduced honey yield.
- If you believe tracheal mites are a problem in your apiary, consider the use of plain extender patties (two parts sugar to one part vegetable shortening). Place patties in the middle of a two-story colony, or on the top of a single story.
- Find and remove queenless or dead-out colonies. If pollen is being foraged actively, this generally indicates a healthy colony and queen. Determine why colonies succumb: queenlessness, starvation, disease? If the frames and hive components are free of disease and in

good condition (e.g., no Nosema spore fecal matter covering everything, no AFB scale in the brood cells, and brood frames that are less than five years of age), then store for future use in a dry location. Stack on end so air and light can penetrate to discourage mold growth and wax moth activity.

- You may want to requeen weak colonies and make divisions out of strong ones. A large adult population, lots of brood, and a solid brood pattern are indicators of a good queen and a strong colony. A queenright colony has eggs and brood, so, unless you want to requeen or make a division at this time, you do not need to find her.
- Spring usually brings some of the windiest weather, so make sure lids are secured after you break the seals.
- Free and unbind frames from the clutch of wax and propolis. Remove burr comb. Replace poor-quality frames or brood frames older than five years with new comb or foundation. At the least, move poor-quality frames to the sides of the brood boxes and place the best-quality frames in the middle. It is best to separate the brood boxes to isolate the queen and to work one brood box at a time.
- Exchange the bottom boards with clean, dry bottom boards (or at least clean them). Screen bottom boards should be okay.
- When reassembling the hive, if the lower brood box is mostly empty, which is often the case, reverse its location and put it on top. This will relieve congestion and provide expansion room for the queen and the brood nest. There are times when you may not want to reverse based on the configuration of the brood nest. For example, if brood is located in both boxes and it is still early in spring with cold temperatures, reversing and separating a portion of the brood from the main and then not having enough adult bees to cover both areas of brood can lead to chilled and dead brood. In another example, if the queen is already working in the lower box and the upper box is still mostly food stores, then reversing would not increase space for the queen. In this case, it would be better to pull excess frames of honey and replace them with empty frames.
- Keep the front of hives clear of grass to promote ventilation and forager access.
- April is the best time to make divisions to make a robust honey crop the current year. Making divisions is also a form of Varroa control, as it disrupts the brood cycle and sets the mites back. (Swarming does the same thing and to a greater extent.) Keep in mind that wellmated queens are not always available early in spring

and that feeding and the need to make well-balanced divisions (ratio of adults to brood) may be necessary to prevent chilled brood.

- Consider adding disease-free, dead-out brood boxes to booming two-story hives in anticipation of making divisions when your queens arrive. It will relieve congestion and give these overly populous colonies something to do—clean and refurbish frames. It will make an excellent division later.
- If you want to give your colonies a boost, begin stimulating feeding (equal parts sugar and water by weight) six weeks prior to the major nectar flow (i.e., start about mid April). DISCONTINUE stimulative sugar feeding before supering.
- Swarm season starts with the flush of new growth on plants and trees, and will continue into June. Nuc boxes containing one frame that has had brood, one frame of honey and pollen, and the balance foundation are ideal for catching swarms. Consider pouring sugar water or honey all over the frames to increase their attractiveness and to provide additional resources for drawing out foundation.
- Wax moth activity dramatically picks up when the temperatures rise. Keep an extra eye on stored frames that have had brood and have pollen. Moth crystals (paradichlorobenzene) can be used for control, as well as freezing the frames. Exposing the frames to light can inhibit the moths, too.
- In a normal year, May is the month to add supers, but it depends on your location and the year. My suggestion is to keep an eye on both the blooms and the weather. Super early if it is warranted. Remember the withdrawal time requirements for treatments. Also, if you use paradichlorobenzene for moth control, air out supers on a warm day.
- Here's one last thought: Be careful when using a new miticide. I used Apiguard this past fall [2009] and deviated from the instructions. I followed the advice of a well-known beekeeper. It proved disastrous.

Adapted from: *The Bee Line*, March and April 2010. Please keep in mind that changes in recommendations for colony management are ongoing. Todd's experience with Apiguard also serves as a reminder to take care with all treatments—for example, those recently approved for Varroa (described on page 10). Follow label instructions! In addition, the BMPs for beekeepers taking bees to California for almond pollination may provide some useful reminders as well. They can be reviewed and downloaded at: www.extension. org/pages/33379/best-management-practices-bmps-forbeekeepers-pollinating-californias-agricultural-crops.

# RECENTLY APPROVED TREATMENTS FOR VARROA INFESTATION

Take care to follow all label instructions and take all precautions.

# HopGuard™

## Potassium salt of hop beta acids

EMERGENCY EXEMPTION: February 7, 2011, to December 31, 2011. Section 18 approvals for the use of HopGuard<sup>™</sup> have been issued in Oregon, Washington, and Idaho. Although the product is not registered with the Environmental Protection Agency, Section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act allows an unregistered product to be used in certain regional areas when an emergency pest situation exists and there is no viable alternative method of control.

## THESE USE DIRECTIONS MUST BE IN THE POSSES-SION OF THE USER AT THE TIME OF APPLICATION.

DIRECTIONS FOR USE: HopGuard<sup>™</sup> may be applied using treated cardboard strips at the rate of one strip (1.92 grams of potassium salt of hop beta acids/strip) per five deep combs covered with bees in each brood chamber. For example, two strips are needed for a 10-frame brood chamber when all the combs are covered with bees. For control of Varroa mites, a maximum of three applications per year (six strips or approximately 11.52 grams of potassium salt of hop beta acids) per 10-frame colony may be placed in the brood chamber. Strips are to be placed only in the brood chamber (not in the honey super). The folded strips must be opened and hung over a center brood frame with one-half of the strip on each side of the frame. If using a second strip, apply it to an adjacent center frame about four inches away from the first strip. Apply at a rate of one strip per five deep combs covered with bees in each brood chamber. Strips must be placed hanging between frames and within the colony cluster, and not laid on top of the frames. Leave the strips in the colony for four weeks. Retreat, as necessary, up to three times per year. Application timing (usually during spring, summer, or fall) should be based on the levels of Varroa mites observed in the colony.

Using this product in rotation with another approved miticide with a different mode of action will decrease the potential for Varroa mites to develop resistance. Honey should not be harvested from the brood chamber. Users may only harvest honey from the honey supers.

Any adverse effects resulting from the use of HopGuard<sup>™</sup> under this emergency exemption must be immediately reported to the Oregon Department of Agriculture. For additional information, visit: www.betatechopproducts. com/markets/bee-health.

# Mite-Away Quick Strips™ (MAQS™)

## Formic acid (including formates) and other ingredients

**REGISTRATION:** Officially registered at the federal level by the Environmental Protection Agency as of February 4, 2011, obtaining Section 3 registration. Also registered at the state level in Oregon and numerous other states.

WHEN TO TREAT: Use Mite-Away Quick Strips<sup>™</sup> as part of an Integrated Pest Management (IPM) program. Treat only if treatment thresholds are exceeded. Treatment period is for this product is 7 days. Treatment ends at day 7.

When treatment levels are reached, use Mite-Away Quick Strips<sup>™</sup> for single or double brood chamber, standard Langstroth equipment honey bee hives, honey bee colony cluster covering a minimum of six brood frames. Outside daytime temperature highs should be between 50 and 92°F on days of application. Excessive temperatures (>95°F) during the first three days of treatment can cause excessive brood mortality and absconding. Brood mortality may occur in the initial stage of treatment. Overall colony health is not expected to be affected, with brood rearing returning to normal by the end of treatment. **Treatment of smaller colonies than those listed on the label will result in excessive brood mortality and even in colony mortality.** 

APPLICATION: Disturb the colony activity as little as possible during the application process. Remove the strips from the outer pouch. For hives with single brood chambers, lay two strips across the top bars of the frames of the brood chambers, staggering them so they lay flat and across the full width of the hive body, with approximately 2 inches between strips and 4 inches between the ends of the brood chamber and the outer edges of the strips. For hives with two brood chambers, place the strips as described above on the frame top bars of the lower hive body, so the strips are in-between the brood chambers. Put on honey supers, if a honey flow is anticipated. The active ingredient dissipates after 3 days; however, do not disturb the colony for 7 days to allow it to recover from any side-effects that may have occurred. Spent strips need not be removed after treatment. The bottom hive entrance needs to be fully open for the entire duration of treatment. Entrance reducers MUST be removed to prevent excessive damage to the colonies. Treat all bee colonies in the apiary at the same time. Allow a minimum of one month between applications. For additional information, visit: www.miteaway.com.

# A HONEY OF A HEARING

## Fred VanNatta

Thanks to some between-sessions work spearheaded by George Hansen and others, a change in Oregon law of importance to beekeepers has gotten off to a flying start in this 76th regular session of the Oregon legislature. The concept for the bill is simple: authorize and instruct the Oregon Department of Agriculture to adopt administrative rules "establishing standards of identity and quality and labeling requirements" for honey. The department is being instructed to give consideration to any definitions and standards used by a federal agency, another state, or an organization administering a regional, multiregional, national, or international agreement on honey.

It so happens that several states have adopted the generally accepted international standard, the *CODEX Standard for Honey*. The current bill, known as *House Bill 2947* (HB 2947), was drafted and approved for early introduction by a legislative interim committee. This approval got the bill to the House of Representatives Agriculture and National Resources Committee in the early days of this session.



House Bill 2947 was first scheduled before the eightmember House Committee (four Republicans and four Democrats) on Wednesday, February 2, 2011. Paul Andersen, Oregon State Beekeepers Association Vice President, Joe Becker, a beekeeper from Eugene, and Ralph Rodia and myself, both beekeepers from Salem, attended the hearing prepared to comment on the bill. The committee had too many bills to consider, however; HB 2947 was "set over."

Both Andersen and Becker indicated that they would be unable to attend another meeting immediately. The bill was heard at the end of the session on Friday, February 4, with witnesses on a two-minute time limitation for testimony. Three witnesses, Rodia, myself, and Ken Bial, also a Salem-area beekeeper, testified. I identified my testimony as being on behalf of the Oregon State Beekeepers Association.

The bill was scheduled again for a hearing and work session (where the committee members discuss the bill) on Wednesday, February 9. Committee members, noting the support by Co-Chair Brian Clem, who has orchard interests in the Hood River area, gave the bill their unanimous support. HB 2947 now has passed the House of Representatives with 57 *yes* votes, 2 *no* votes, and one member absent. It has moved to the Senate and has been referred to the Environment and Natural Resources Committee where it awaits a hearing.

## Federal Seizure Of 10,560 Gallons of Counterfeit Honey from Warehouse In NE Salem, Oregon

# UNITED STATES ATTORNEY'S OFFICE District of Oregon News Release

# 192 Fifty-Five Gallon Drums of Counterfeit Honey Seized in NE Salem Allegedly Falsely and Fraudulently Identified as "Thai Honey"

PORTLAND, Ore. – On March 11, 2011, the US Attorney for the District of Oregon, Dwight C. Holton, announced the seizure of approximately 192 fifty-five gallon drums (10,560 gallons) of counterfeit honey from a warehouse in NE Salem, Oregon. This seizure is part of an ongoing joint investigation conducted by the United States Attorney's Office in Oregon, the United States Attorney's Office in Chicago, Illinois, and United States Homeland Security Investigations.

A company called *Eastern Commodity Company* allegedly imported the counterfeit honey, namely compound malt sweetener, from Hong Kong in October 2009, then shipped the merchandise to a warehouse in Wisconsin. According to the affidavit, the warehouse received a series of e-mails directing it to remove Chinese inspection stickers from the drums, apparently to conceal their Chinese origin. The affidavit alleges that the drums were eventually shipped to two different honey packers in the Midwest, along with paperwork falsely describing the compound malt sweetener as honey from Thailand. The honey packers rejected the drums, which were then eventually shipped to a warehouse in Salem, Oregon.

## **TRUE SOURCE HONEY**

*True Source Honey* is an effort by a number of honey companies and importers to designate high-quality honey and the careful steps taken to ensure that it is ethically sourced. The True Source Honey initiative helps to provide protection to customers and consumers, as well as to the reputation of honey produced within the United States and around the world.

The True Source Honey Pledge reads as follows: We pledge to protect our customers and consumers, as well as the global reputation of honey products, by ensuring to our utmost ability that honey is ethically sourced in a transparent and traceable manner from known beekeepers and brokers; moves through the supply chain in full accordance with US law and without circumvention of trade duties; and carries truthful labeling as to its source, has been tested to ensure quality, and has been handled in a safe and secure manner from hive to table. We endeavor to do business with companies that share our concern for food safety and security. We pledge to stand against the collection, processing or sale of adulterated honey or honey that has been obtained in circumvention of US law. We espouse a global standard for high-quality honey that does not allow for adulteration with added syrups or other sweetener extenders, or use of inappropriate additives in honey production. We actively support US beekeepers, including supporting research to help beekeepers maintain the health and high quality of US honey production and to fight colony collapse disorder.

For more information, visit: www.truesourcehoney.com.

# FAIR PLAN

## Marjie Ehry

I met with the State Fair on February 14. We had a good visit, and they will give us a 10 foot x 15 foot area this year. We will do without the bee cage and have a rotating observation hive instead. People will be able to get up close and really inspect the queen, brood, and bees. In addition, the honey entries will be set up in the booth.

We want the booth to be educational with handouts and lots of recipes. The fair also would like us to take part in the demo area (stage) with talks on bees, cooking demonstrations, or whatever we would like. This is where the Honey Queen will fit in nicely.

The Willamette Valley Beekeepers Association has done a great job with the booth; further, their members have achieved all of these things in the past. So, we will just expand on their work with a fresh look. Entry to the fair and parking is free for those working shifts.

Let's make this a real a people stopper! Please let me know if you would like to help in any way. I can be reached by phone at 503.864.2138 or by e-mail at marjehry@hotmail.com.

Look forward to hearing from everyone!!



## A CALL TO SWARMS

## Herb Brasington

The OSBA Swarm Call List has been cleared for the new year. This year, the order of the names for each location given will be placed on a first-requested, first-listed basis.

# The list is limited to active members of Oregon State Beekeepers Association.

Beekeepers who wish to be placed on the list need to send an e-mail request with your name, phone number(s), and location(s) desired to me at: webmaster@orsba.org.

# QUESTIONS OF THE MONTH

## Question

Is it okay to put drivert directly onto the inner cover in the winter?

#### Response

**Dewey Caron**: Yes, dry sugar (drivert is a good sugar source) can be poured onto the inner cover around the oval hole for a winter feed.

#### Question

This past fall, I lost several hives. The bees died over the period of a couple of weeks. The hives had handfuls of dead bees. They did have some Varroa mites, but there was no smell. It was right after the first cold days. Do you know what might have happened? Or what to look for?

#### Responses

**Ramesh Sagili**: It appears as if your hive was severely infested with Varroa mites. Did you treat your hives for Varroa mites on time? If they had tracheal mites and Nosema as well, then the problem is compounded and the colony might have collapsed at a faster pace. You didn't mention about honey stores, so I am assuming that they didn't die of starvation. If you saw significant number of crawling bees outside the hive, then it might be an indicator of tracheal mite infestation. Whenever it is possible to collect some dead bees (at least 30–50) and if you are curious to find the cause, send your samples for analysis to a diagnostic lab. At the Oregon State University bee lab, we do provide limited testing for tracheal mites, Nosema, and Varroa.

**Dewey Caron**: Fall death of an otherwise apparently healthy colony over a short time period could be due to a number of factors. We see colonies with high tracheal mite levels die in this fashion, as do colonies with the Parasitic Mite Syndrome (PMS). Varroa-infested colonies usually survive into spring, and colonies dying with what we label *CCD symptoms* usually mean no adult bodies present. Colonies usually starve in the spring (rather than fall), when their demand for stored honey reserves to support brood rearing is highest, but colonies can also fail in the fall from lack of honey or queen problems not evident before the cold snap. In other words, we often do not know but from symptoms and timing it sounds like tracheal mites or PMS. Air out the equipment (robbers may already have cleaned out the honey stores) and use the frames this spring to house a new swarm, a package, or a divide.

## Question

Would you explain the advantages and disadvantages of various strains of bees? To what extent do they crossbreed? And what happens when they do?

## Response

**Dewey Caron**: There are differences in the bee strains and races. Some are subtle and, as soon as the colony replaces their queen, that colony is no longer what it was before queen replacement. In fact, the result is all too often a defensive colony because of crossbreeding. There are a number of good references, including my book Honey Bee Biology & Beekeeping, The Beekeeper's Handbook by Diana Sammataro and Alphonse Avitabile, Dadant's First Lessons in Beekeeping by Keith Delaplane, among others, that enumerate the differences (both good and less desirable qualities) of the various races and strains. The Internet has much of this information, but be careful of believing all you might read about bee races/strains. There has been no objective testing of what is available to US beekeepers and purity (of, for example, Carniolan race bees) is not guaranteed. Some would say we have an American bee (mainly Italian) in the US. Recent efforts to produce queens and keep the Russian bee stock intact and the New World Carniolan program of Sue Cobey are notable exceptions of concerted efforts to maintain stock integrity. Hygienic bees and SMR stock are testable in an apiary with a simple procedure by individuals who wish to try such bees, although breeding has been single trait mainly and the bees may be less than desirable in their other traits (defensiveness, productivity, and overwintering ability, for example).

**Note**: Much appreciation for the questions and the answers! Please continue to send questions and wonderings: e-mail to osba.newsletter@gmail.com; mail to 4207 SE Woodstock Blvd Ste 517, Portland OR 97206; or call 503.772.3486.

## Board Meeting Minutes—Continued from page 3

## **OSBA** Logo

A graphic artist and LCBA member in Eugene has agreed to create a logo for OSBA. Board members would like to have the logo on the directory and even on T-shirts!

## Varroa Treatments

A brochure for Mite-Away Quick Strips<sup>™</sup> was passed around. The strips are within days of being approved by the EPA. The 24(c) will be ready when they are approved, and hopefully they will be available through bee supply companies by February. HopGuard<sup>™</sup> also should be approved any day now. When ready, it will be available through Mann Lake.

## **Oregon State Beekeepers Association Policies**

Herb Brasington suggested at a previous business meeting that we set guidelines and policies that are important, but not set in the bylaws and constitution. Listed below are the suggested policies:

A minimum of \$20,000 will be retained in the General Fund for emergency use and will not be used without the approval of the Oregon State Beekeepers Association Executive Board.

- Payments may not be refunded to members until checks have cleared the bank.
- At Northwest Corner Beekeeping Conferences, the conference host is responsible for receiving and processing all registrations.
- Oregon State Beekeepers Association Executive Board Members are not eligible for conference scholarships.

## **Oregon Master Beekeeper Program**

Carolyn Breece provided an update on the developments of the Oregon Master Beekeeper Program. The planning committee has completed the design of the apprentice level of the program and is currently recruiting instructors. An instructors' meeting is planned for April, and the Master Beekeeper program will be launched at the OSBA annual conference in Seaside in November. Harry Vanderpool offered to create a Master Beekeeper forum on the OSBA message board.

## Annual Northwest Beekeeping Conference

This year, the OSBA annual conference will be in Seaside, Oregon, on November 17, 18, and 19. The Washington State Beekeepers Association will



not be participating. The associations will return to the cycle of having a joint meeting at a later time. Board members discussed ideas for speakers and presentations. Many liked having presentations on practical topics, such as safety, how to make pollen patties and candles, and so forth. Paul Andersen is developing a two-track system for the meeting: participants may choose to attend the traditional presentations or a series of presentations on alternative methods of beekeeping, such as Warre or top-bar hives. Paul is seeking suggestions for a theme to guide this year's conference.

# **True Source Honey**

Jan mentioned a website for *True Source Honey* (www. truesourcehoney.com). This is a program developed to protect the honey supply and prevent illegal imports. Please check out the website and become informed of this issue.

Bill Edwards motioned to adjourn the meeting at 4:30 PM. Paul Andersen seconded the motion. We will meet again in April.

Respectfully submitted,

Carolyn Breece



# INTRODUCING OSBA TREASURER

## Paul Kowash



I appreciate the opportunity to serve as your treasurer. My interest in bees started when I was in high school and had a few hives on the family farm. After high

school, I tried farming until I lost all of my savings (very easy to do). I then migrated to the banking industry (where the money is). Over the next 40 years, I pursued a career in banking and credit union management. I ended that with a 15-year period as a bank and credit union examiner for the State of Oregon. During this period, the bees fell by the wayside.

Now retired, I acquired a couple of hives as a hobby. I joined the Portland Metro Beekeepers Association and now the Oregon State Beekeepers Association. I intend to keep at this level as my interest lies more in the habits of bees rather than for growth and profit. As a retiree, I now have the time to be involved with both associations and look forward to working with all of you.



## **COMMON SENSE, LOGIC, and SCIENCE**

## Fred VanNatta

Several years ago, I visited friends in Salem who were working with agriculture folks and the pesticide industry. I explained the newly identified crisis facing beekeepers called *Colony Collapse Disorder*. I told them I believed that low dosages of pesticides accumulating in the pollen or nectar from applications of systemic pesticides caused the problem.

They responded, "Fred, you have not kept up with the industry." This was true, as the last time I had worked on the issue was when microencapsulated pesticides were commonplace and being gathered during pollencollection activities. My friends pointed out that the industry does not use poisons in systemic pesticides; instead, nicotine, which does not kill honey bees, is being used now.

## Hmm. Well, another idea killed by the reality of the facts.

A couple of years later, I came across a report of a study in Europe, France I think it was, that indicated that nicotine did not kill honey bees, but it did affect their memory. For the several years since then, I have operated on the principle my wife taught me over many years: *When I am convinced against my will, I am of the same opinion still.* 

Of course, a bad memory is just as bad or may be worse than a touch of poison. I have been unable to understand why the millions of dollars spent on research by the scientists in recent years have not pointed the finger at systemic pesticides. Every bee journal I read and every convention I attend, I expect to hear, "The cause of the disappearing bees has been discovered. Systemic pesticides are the problem."

Finally, the January-February issue of *The Bee Line* arrived with a cautious quote from a professor of entomology at Penn State who suggests that neonicotinoids may be the problem. And I found it first in our own *Bee Line*, a journal that my daughter and I used to help produce. It also noted that Germany, Italy, Slovenia, and France have banned the use of such pesticides. Obviously, we are closing in on the solution.

Beekeepers with few bees (like myself) have to take

our licking and keep on ticking by replacing our losses. Commercial beekeepers working the pollination circuit can do a lot more. They can ask their farmers if they use *clothianidin* or any similar pesticide. If they do, then beekeepers can refuse to rent to them—or they can charge a healthy premium to offset their unavoidable losses.

The Oregon Department of Agriculture provided me available information from their abbreviated pesticide reporting program on the use of clothianidin in Oregon. In 2007, the Pesticide Use Reporting System (PURS) reported the use of 80 pounds of clothianidin on Middle Columbia Water Basin field crops. This includes portions of Hood River, Wasco, Sherman, Morrow, and Umatilla Counties. The amount reported for the same area regarding use on fruits and nuts was 63,417 pounds.

The Lower Columbia Water Basin, which includes Clatsop, Columbia, and Multnomah Counties, reported the use of 1,467 pounds on fruits and nuts.

The 2008 data are scanty compared to the 2007 data, but the 2008 data do include the information that 184 pounds were used on nursery stock and Christmas trees in the Willamette Basin.

Clearly, exposure to fruit and nut blossoms in the Columbia River Basin is a high-risk activity.

It is my observation there is a greater interest in beekeeping now than anytime since sugar rationing. We need to mobilize that interest to protect the onethird of America's food supply made possible by our hardworking little friends, imported here long ago from Europe.

Meanwhile, I still believe systemic pesticides are the principal cause of CCD, although the shortened life span of bees caused by mites can be a contributing factor. I hope to live long enough to see a consensus of scientists confirm what I long ago convinced myself is true—and steps taken toward resolution.

**Note**: The latest available progress report of the CCD Steering Committee is available at: www.ars.usda.gov/is/ br/ccd/ccdprogressreport2010.pdf. The UN Environmental Programme report *Global Honey Bee Colony Disorders and Other Threats to Insect Pollinators* also may be of interest; it is available at: http://www.pollinator.org/PDFs/ CCD\_Colony\_Disorder\_Threats.pdf.

# HONEY BEE COLONY MORTALITY IN THE PACIFIC NORTHWEST: Winter 2009/2010

## Dewey Caron and Ramesh Sagili

Beekeepers have always had to face overwinter colony losses, but recent seasonal losses have been unusually high. The bee malady labeled *Colony Collapse Disorder* (CCD), first described from losses initially observed in Florida in the winter of 2006/2007, was subsequently found throughout the United States. CCD is characterized by the sudden disappearance of a colony's adult worker bees. At least some of the recent years' elevated colony losses include this CCD field symptom.

Substantial colony losses with somewhat similar characteristics, labeled with a variety of names, have occurred over at least 100 years of US beekeeping. A 2007 literature study by Underwood and vanEngelsdorp reported more than twenty instances of large-scale colony losses since the late 1860s. Many of the reported instances involved symptoms that included the disappearance of large numbers of bees. One early documented loss, referred to as *disappearing disease*, occurred in 1915 in Portland, Oregon (Root and Root 1923), although Tew (2006) stated losses may have been more widespread from Florida to California.

The extent of colony losses has been documented the last four years in annual national surveys conducted by the Apiary Inspectors of America (AIA) in cooperation with the USDA. The initial survey of spring 2007 queried beekeepers in fifteen states; it reported a 31.8% loss rate (vanEngelsdorp et al. 2007). The 2007/2008 and 2008/2009 surveys queried about 20% of the owners of US (mainly commercially) managed colonies; the spring 2008 estimated loss rate was 35.8%, 13% higher than in 2006/2007 (vanEngelsdorp et al. 2008). The spring 2009 rate was lower at 28.6% (vanEngelsdorp et al. 2010a). The most recent overwinter survey, which received responses from 17.7% of the owners of managed bee colonies via both electronic and phone surveys, reported a rate of 34.4% (vanEngelsdorp et al. 2010b). Clearly, such loss levels are of great concern and unsustainable in the long run.

In the Pacific Northwest, Burgett et al. (2009) reported that, prior to the appearance of the two honey bee mite parasites *Acarapis woodi* and *Varroa destructor* in the midto-late 1980s, beekeepers typically had winter losses of 10–15% or less. Two other estimates pegged loss rates at a similar level: 15% in Canada (Pernal 2008) and a 16% "normal" loss, once colonies with CCD symptoms were removed, from the spring 2007 loss estimate (vanEngelsdorp et al. 2007). The introduction of bee mites caused loss rates to increase substantially—a ten-year study (1989–1998) of Pacific Northwest (PNW) beekeepers reported an average annual loss rate of 22.6% among commercial beekeepers (Burgett 1998).

To date, no single factor has been identified as the reason for the elevated losses documented since the winter of 2006/2007. Although pathogens are actually killing the bees, the reasons why honey bees appear to be so susceptible to the pathogens is a source of considerable debate and study. A federally funded CAP project, reported monthly in the *American Bee Journal*, describes such research. A recent analysis of samples from Florida and California colonies with CCD symptoms failed to determine what might have caused the heavy losses (vanEngelsdorp et al. 2009). Two very recent studies have suggested that viruses, including a newly discovered DNA virus, and the microsporidian *Nosema ceranae* are highly correlated with colonies exhibiting CCD symptoms (Bromenshenk et al. 2010).

#### **Oregon/Washington Losses in the PNW**

Beekeepers in the Pacific Northwest have not escaped the impacts of CCD. Burgett et al. (2009) documented average bee losses for the winter of 2007/2008 of fourteen commercial and eleven semi-commercial beekeepers (owning an estimated 68% of the total colonies in Oregon and Washington) as 30%. Caron et al. (2010) analyzed thirty-four mail responses (12 commercial and 22 semi-commercial beekeepers) using the same Oregon and Washington beekeepers) using the same Oregon and Washington beekeepers list for the 2008–2009 winter, representing 43% of the estimated managed colonies. The respondents loss rate, 21%, was considerably lower compared to the previous year.

A different survey form, distributed at 2009 local bee association meetings west of the Cascades, had a 25.8% loss rate from 100 small-scale beekeepers. The median number of beekeeping experience of this group was three years and median number of colonies was two; the largest number of colonies owned by a single beekeeper in this group was forty-five.

Both surveys were again conducted in the past (2010) spring. About 150 surveys, with the same questions of the national ONLINE survey form, were mailed to commercial and semi-commercial beekeepers (and some small-scale Washington beekeepers). Additionally, 125 small-scale Oregon and sixteen+ Washington beekeepers provided loss estimates at April local association meetings. Independently, two additional surveys were conducted of losses for Washington state beekeepers.

## 2010 Losses

Twenty-two Oregon commercial beekeepers (owning a total 37,085 colonies in the fall) and twelve Washington commercial beekeepers (beginning winter with 70,719 colonies) had essentially similar losses (9,091 colonies lost in Oregon = 24.5% and 17,278 lost colonies by Washington commercial beekeepers = 24.4%). Semicommercial beekeepers (owners of from 50 to as many as 500 colonies) had higher losses; seven Oregon beekeepers reported a 26.4% loss (290 of 1,098 going into winter) and six individuals in Washington had a loss of 42.1% (241 colonies lost of 573 fall units). Combined weighted commercial/semi-commercial losses (n = 47 beekeepers) were 24.6%. The number of bee colonies included in surveys was equal to 80% of USDA, NASS-estimated colony numbers in the two-state region. Survey forms were returned from approximately 44% of those queried.

The mail survey included responses from twenty smallscale Washington beekeepers (367 colonies into winter with 176 lost = 48% loss); sixteen additional Washington beekeepers were queried at local association meetings (the 16 started winter with 92 colonies, lost 38 colonies = 41% loss). In Oregon, 125 small-scale beekeepers that completed a survey form at local meetings lost 275 of 626 fall colonies for a 44% loss. Combined weighted smallscale Oregon and Washington (1,085 colonies with 489 lost) = 45% loss, nearly double the losses of larger-scale beekeepers. (By comparison, national bee losses were: 2007 = 31.8%, 2008 = 35.8%, 2009 = 29%, and 2010 = 34.4%.)

Average size Oregon commercial operation = 1,686 colonies; average size Washington commercial operation = 5,893; average Oregon semi-commercial = 157 colonies, and average Washington semi-commercial = 95.5 colonies. For small-scale beekeepers, it was three colonies. In another question of the 2010 survey, we asked average years of experience. For commercial/semi-commercial, the average years of experience was thirty years and for small-scale beekeepers it was three years.

#### Two Additional Surveys of Washington State Beekeepers

In the March 2010 WSBA newsletter, commercial beekeeper and WSBA VP Eric Olson and newsletter editor

Paul Lundy shared information on their survey numbers of losses of Washington state beekeepers. Eric found a loss rate of 38.7% for twenty-nine commercial/semicommercial beekeepers (started winter with 87,384 colonies and lost 33,783; smallest operation = 194 colonies). Paul Lundy, in his beekeeper survey, 80% owning less than twenty colonies and mostly located west of the Cascades, found the lowest level of losses at 25% in an early season survey.

It appears the sixteen west-of-Cascades beekeepers (Lewis and Cowlitz Counties) and the small-scale beekeepers responding to our PNW mail survey had heavier losses (40% or more), similar to the commercial beekeepers as reported by Eric (38.7%), compared to the hobbyists surveyed by Paul. Paul did indicate that his survey was conducted in early March and might have included results from beekeepers who had not yet looked closely at their colonies.

## Beekeeper Estimates of Reason for Losses

In each of the three survey years, beekeepers were asked to estimate the reason for their colony losses. In most recent survey, twenty-seven (65%) said mites (range 5-100% of losses, med = 40%); nineteen (46%) listed starvation (range 1–45%, med = 10%); thirty-three (80%) listed queen failure (range 1–86%, med = 10%); seventeen (41.5%) listed CCD (range 10–100%, med = 54% with all but one indicated as major reason), and fifteen (36.5%) listed other reasons such as yellowjackets, ppb, flood, virus, with five (12%) listing Nosema. Of seventeen listing CCD, five were those reporting the largest Oregon losses and eight with the largest Washington individual losses. Table 1 shows the three-year summary (see Caron et al. 2010 for explanation of 2007/2008 and 2009/2010 losses).

In all three survey years, mortality rates for beekeepers who lost colonies to CCD are higher than for those who reported no losses from CCD, although the difference in mortality rates was small for the winter of 2007/2008. In the 2010 national survey, 42.1% of colonies reported as dead had the symptom of "absence of dead bees" (vanEngelsdorp et al. 2010b).

In the question asking commercial and semi-commercial respondents to consider the level of colony losses since CCD, twenty-four (60%) indicated losses were higher, thirteen (32%) said they were about the same, while only four considered them lower. Three individuals took exception to our use of the term *CCD* to form this question. Comparison of the past three years is shown in Table 2.

TABLE 1. Pacific Northwest beekeeper opinions regarding causes of winter losses.\*

Year	Reason for colony failure (%)				
	CCD	Queen failure	Mites	Starvation	Other
2007/2008	32.7	23.0	25.2	3.1	15.9
2008/2009	35.2	22.3	17.4	3.8	21.3
2009–2010	42.9	7.9	31.7	7.9	9.5
		, ,			

\*Numbers represent the percentage of all colonies lost that beekeepers attributed to each of the causes listed.

TABLE 2. Assessments of Pacific Northwest beekeepers
of changes in losses (%) since the arrival of CCD.

Year	Higher	~ Same	Lower	No Response
2008	44	44	8	4
2009	44	44	8	4
2010*	60	32	4	4
*Three inc	hividuala taalu	avaantian ta	olding with	CCD term

\*Three individuals took exception to asking with CCD term.

While losses have been extensive, neither the USDA, NASS estimate of numbers of bee colonies (2009) nor the 2007 US Agricultural census has revealed a dramatic decrease in number of managed bee colonies. Table 3 compares survey responses to a question asking how many and how losses were replaced (respondents selected from offered choices). The two earlier PNW surveys found beekeeper replacement rates higher than their losses—20.7% more colonies were started than lost in 2008 and 26.4% more started in 2009. In sharp contrast, replacement rate was reported as only 6% this past (2010) season.

TABLE 3. Preferred method of colony replacement (%) by year.

2008	2009	2010
78.3	94.8	66.5
15.9	0.5	12
1	1.6	11.8
1.8	0.5	7.7
3.1	0.8	2
0.1	2.1	0.1
	2008 78.3 15.9 1 1.8 3.1 0.1	2008 2009   78.3 94.8   15.9 0.5   1 1.6   1.8 0.5   3.1 0.8   0.1 2.1

In 2008, 78.3% of colony replacements came from splits of beekeepers' own colonies. This method of colony replacement was favored by 94.8% in 2009, but dipped dramatically to 66.5% in 2010. Purchasing of nucs from other beekeepers, another survey response choice, was heavily favored in 2008 (15.9%) and again in 2010, but was not so favored in 2009. Purchase of packages or established colonies greatly trails these first two options for the first two survey years but accounted for 19.5% of replacement choice this past spring.

A question on the 2009 and 2010 surveys asked beekeepers to compare their losses during the most recent spring compared to the previous one. Actual losses reported in the surveys were one-third lower in 2009 compared to 2008 and one-sixth higher in 2010 compared to 2009.

higher and 32%, lower.

A question asked respondents to indicate what percentage loss would be acceptable. Twenty-six (62%) indicated a 3–10% range, nine respondents (22%) said up to 15%, five indicated up to 20% with only two saying 25 or 30%, which was the actual range. In the 2010 national survey, 3,979 respondents reported that a 14.5% loss would be considered acceptable; 65% suffered losses above this level (vanEngelsdorp et al. 2010b).

## **Could Almond Pollination Be Responsible?**

One suspicion has been that losses might be associated with certain crops, with almonds and fireweed specifically mentioned. A question asked for the percentage of bees used for pollination of California almonds. Twenty-seven of the commercial/semi-commercial beekeepers (60%) said they rented 100% of their colonies, an additional ten rented from 70–99%, with one sending 60%. Only seven said that they did NOT send any of their colonies to California, including two Oregon commercial beekeepers. Oregon and Washington individuals who did not move had twice as heavy losses (see Table 4). In the national survey, 2.5% of beekeepers reported moving some colonies to almonds, moving on average 80.4% of their colonies. The average loss of beekeepers that moved, compared to those that didn't move bees into almond pollination, was not significantly higher (vanEngelsdorp et al. 2010b).

## Discussion

We do not know why our mail survey of commercial/ semi-commercial beekeepers reported considerably lower losses (24.4%) compared to the higher loss level, 38.7% in Eric Olson's survey. Surveys included about the same numbers of colonies (70,719 in our survey versus 87,384 colonies in Eric's) and, presumably, the two surveys included many of the same individuals. The Olson survey was about a month earlier. National average loss estimates for the two states (Washington = 32.5% and Oregon = 29.7%) were also higher than in our survey (see vanEngelsdorp et al. 2010b). It is clear, however, that losses of all level of beekeepers are much too high and unsustainable.

The most common response in 2009 survey (44%) was that losses were about the same with roughly equal percentages of respondents indicating that losses were either higher (29%) or lower (24%). In 2010, 17% estimated their losses to be the same, with 51% saying

TABLE 4. Loss co	mparison (%) wh	ether or not mo	oved for Cali	fornia almond	pollination.
Category	Moved for	Number of	Average	Total Loss	Total
	Almond	Beekeepers	Loss (%)	(number of	(%)

	Almond Pollination	Beekeepers	Loss (%)	(number of colonies)	(%)
National*	no	4,063	42.5	112,082	
	yes	103	35.5	460,607	80
Oregon/Washington	no	7	53.7	675	
	yes	40	24.5	26,225	84.5

\*National data from vanEngelsdorp et al. 2010b.

Colony losses of Oregon and Washington beekeepers ranged from 21% to 30% over the three survey years for commercial and semi-commercial beekeepers, and in each survey year somewhat greater for small-scale beekeepers. The level of losses in the 2007/2008 PNW survey was 16% lower (30% vs 35.8%) compared to losses reported in the national AIA/USDA survey. Both surveys found decreased losses following the 2008/2009 winter (21% in the PNW and 28.6% nationally), with a sharper percentage decrease for PNW beekeepers (30% compared to 20%). The losses experienced in 2008/2009 are similar in magnitude to the losses reported by Burgett (1998) for PNW beekeepers during the years from the mid-1980s to the mid-1990s when beekeepers were attempting to deal with new mite problems.

Losses reported this past spring were intermediate between the first two seasons with a larger sampling of beekeepers owning a considerably higher number of colonies (80% of NASS-estimated total managed in two states). Small-scale beekeepers had considerably higher losses, nearly double that of large-scale beekeepers this last survey period. This could be due to management differences with commercial/semi-commercial beekeepers likely to inspect colonies earlier and more frequently, to supplemental feed more extensively, and to simply not accept a colony as lost via addition of nucs and/or uniting management compared to smaller-scale beekeepers.

Also significant is the observation that commercial beekeepers are replacing lost colonies in numbers that actually exceed the number of colonies lost, although the replacement rate was reported only slightly higher this past season. Splitting of colonies from successfully overwintered colonies is the preferred method, but this past season package purchase, perhaps due to possible federal reimbursement funding, was greater than in previous surveys. Such management practices have allowed the beekeeping industry to maintain sufficient colony numbers to service the agriculture industry's pollination requirements, including California almonds, without noticeable increases in fees although the perception is increased longer-distance movement of colonies is necessary to provide adequate colonies. The thought that almond pollination might somehow be a major contributor to heavy losses is unfounded.

Beekeepers consider their recent losses to be higher than prior to the appearance of CCD and above a level they consider "acceptable." Responding beekeepers attribute more of their losses to CCD than to any other single cause, with mites a significant loss reason as well. Thus, current winter mortality rates of 30%+ suggest that (assuming other loss factors have remained constant) about one-third of recently observed losses might be due to CCD.

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**Note**: This article is adapted slightly from the January 2011 issue of the *American Bee Journal*, volume 151(1), pages 73–76. It is reprinted with permission. *The authors express their appreciation to all who have participated and will invite participation in another survey this spring!* 

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## SHAKING BEES FOR MITES

Do you want to know whether or not a hive has Varroa mites instantaneously as well as the level? To save yourself 24 hours and a separate trip to the bee yard, consider a bee shaker! The bee shaker has two jars, with lids fused together and a sieve between the lids. To use, put about 1/3 cup of alcohol (windshield washer antifreeze or powdered sugar can also be used) into one jar. Then



collect about 300 bees from the brood nest and submerge them in the alcohol. Screw both jars together and shake for about 30–60 seconds. If the sample contains mites, they will be on the bottom of the second jar and can be counted easily. You will know after being in the bee yard for a few minutes whether you need to treat or not. Group orders (16 shakers per box) are encouraged to help save on shipping costs.

For additional information, e-mail: info@medivet.ca. See also: http://medivetpharmaceuticals.webs.com/beeshaker.htm and http:// countryfields.ca/medications.html.

# **GINGER SCONES**

- $1^{1/2}$  cups of flour
- 2 tablespoons honey (use more if you like sweeter scones)
- 1<sup>1</sup>/<sub>2</sub> teaspoons baking powder
- $^{1}\!/_{3}$  cup butter or margarine
- $^{3}/_{4}$  cup candied ginger, cut into small cubes
- 1 egg or egg substitute (I use applesauce, about 1 tablespoon per egg)
- <sup>1</sup>/<sub>4</sub> cup milk or water

Mix flour, baking powder, butter, and honey (I like granulated honey when I bake) until crumbly. Stir in ginger pieces. Add egg and milk. Stir until dry ingredients are just wet.

The less you stir, the more tender the scones will be. I also find that, if you are using egg, it helps to blend the egg with the milk or water before you add it to the dry ingredients.

**Sent from**: Lynn Royce. (Thank you, Lynn. They are the *best!*)

**Note**: The March issue of the newsletter was delayed so that it might include an announcement of the Oregon State University decision on hiring. "Due to circumstances beyond our control," the process took longer than anticipated. As a result, the March and April issues are combined here, with an apology for any inconvenience. *Congratulations to Dr. Ramesh Sagili*!

## The Bee Line

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