Native Bees in North America

Lynn Royce

The last speaker at the 2016 Oregon State Beekeepers Association Conference was Dr. John Skinner, who spoke about the non-*Apis* bees in North America. To clarify how organisms are categorized, he talked about common names versus scientific names and discussed briefly how an organism’s common name can be one word or two. For example, honey bee is two words and indicates that it is a bee in the order Hymenoptera, whereas mayfly is one word because it does not belong to the order Diptera and is therefore not a fly.

Then he explained the classification system using the honey bee, starting with Kingdom, the basic groups for living things: plants, animals, fungi, protista. Honey bees belong in the animal group. Phylum is next, and the honey bee belongs to Arthropoda; then Class Insecta, Order Hymenoptera, Family Apidae, Genus *Apis*, Species *mellifera*, Race Italian.

The definition of species is a group of organisms in which individuals can breed and produce viable offspring. They are similar in appearance. Their DNA is almost identical, and the group may include subspecies.

How many of these organisms are there? Starting with Class Insecta, there are over one million described species, but it is thought that very few have actually been described. An estimate of what might be the total number of species of insects is 30 million.

If we count the species in the Order Hymenoptera (Bees, Wasps, Ants, and Sawflies), there have been 108,000 described species worldwide. In the Family Apidae, to which honey bees belong, there are 25,000 species worldwide, with 3,500 in North America and about 400 in Oregon.

Bees are thought to have a wasplike ancestor. The wasp family that has the most characters in common with bees is Sphecidae. Both groups have a “wasp waist,” that is a thin division between the thorax (middle of an insect) and the abdomen (the rear of the insect). They have complete metamorphosis and a prothoracic flap that is a rounded lateral structure covering the first thoracic spiracle.

The bees differ from wasps by having branched body hairs, being pollen feeders, with most bees having structures for carrying pollen called *scopa*.

There are five North American families of native bees: Colletidae, Adrenidae, Halictidae, Megachilidae, and Apidae. There are two families not represented in North America: Stenotritidae restricted to Australia and Mellittridae found in South Africa.

Colletidae are mostly soil-nesting species that line their nest tunnels with a thin...
I am very happy and honored to serve as OSBA President again in 2017. Thank you for your vote, and thank you in advance for your support.

When I reflect upon the Executive Board officers that I am privileged to work with, I want to pinch myself! Is this a dream?

Vice President Jason Rowan, Secretary Mary Edwards, Treasurer Joe Hansen, and a slate of very dedicated Regional Representatives and Branch Presidents make up a very strong OSBA voice in Oregon beekeeping. If this is a dream, please don't wake me! The state of the OSBA is very strong.

Our Agricultural Liaison Committee, under the direction of Dr. Mike Rodia, has been very busy as usual working with the ODA, OSU, Oregon Legislature, and cities and municipalities to clear roadblocks for urban beekeepers. You will be hearing more about that soon.

The OSBA continues to support and encourage the Oregon Master Beekeeper Program and all affiliated regional associations in their endeavors and activities.

Please remember that the OSBA exists to support bees, beekeeping, beekeepers, the industry, our stakeholders, research, education, and safety, not necessarily in that order.

The OSBA is not all about the officers. It’s all about you. Please stay involved and make your wishes and concerns known. You are the eyes and ears of the OSBA. Make sure to report anything you see or hear before you forget.

Please take your camera with you as you work. Send your pictures with notes, experiences, and ideas to Rosanna to publish in The Bee Line. Is your association having an event, a bee school, a picnic? Send your press release to Rosanna to post on the OSBA website!

Here’s looking forward to the best year ever for our bees in 2017!

Harry Vanderpool

How to Help in 2017

In addition to making donations for honey bee research, as noted in the November–December issue of the newsletter, there are many ways to contribute. Help at the conference is always needed. If interested, contact Jason Rowan. In addition, OSBA will be organizing a booth at the Oregon State Fair this summer and hopefully at Ag Fest in April. To help out, contact Paul Andersen. Or if you prefer—and for additional suggestions—go to the Contact page at orsba.org and send a message to the Events Coordinator.

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.
GENERAL MEMBERSHIP MEETING

October 29, 2016  Silverton, Oregon

The OSBA meeting called to order by President Harry Vanderpool at 4:32 PM.

Minutes: Pam Leavitt moved to accept the minutes from the 2015 General Membership meeting, as published in The Bee Line. Seconded by Jan Lohman. Motion passed.

Reports

Treasurer’s Report: Jeff Milligan shared the 2016 conference attendance is close to #345. With around $41,600 income and $30,000 in catering costs alone for 2016 OSBA Conference. Reviewed the various annual expenditures related to the OSBA, along with banking balances. Steve Oda moved to accept the treasurer’s report, as given. Seconded by Stan Scotton. Motion passed with one objection.

Regional and Association Reports

Stan Scotton, regional representative North Coast. Stan extends an open invitation to stop by while visiting Tillamook. He’d be happy to set up a beekeeping tour if you’re ever in the area.

Mureen Walker, regional representative South Coast. Mureen shared that they include the area of Coos County beekeepers, who have a bee yard at the OSU building in Coos County. The Oregon South Coast beekeepers are working on an Education Apiary of their own.

Sarah Red-Laird, regional representative Southern Oregon. Sarah shared that the bees are looking good. They have been holding spring and fall bee schools.

Tom Cinquini, regional representative Portland Metro. Tom said if you want any information about the Portland Metro Beekeepers Association, contact the group’s president, Joe Maresh.

Jordan Dimock, regional representative Eastern Oregon. Bees doing well; however, area fall mite levels increasing.

Steven Coffman, regional representative North Willamette Valley. Mixed results for area beekeepers’ hives and their fall mite levels.

Paul Davitt, president of the Klamath Basin Beekeepers Association. Paul asked the board about becoming their own region with their own regional representative. Submission will be forthcoming for consideration.

Bee Line/Website: Rosanna shared thank you to everyone for submitting all photos, information, and reports for The Bee Line. Please keep sending them—very much appreciated and needed. Updated us about digital newsletter, in process. Also shared we had 52% register for the conference on the OSBA conference website and 27% of OSBA members are registered on the OSBA website. As always, please update any new memberships or changes to regional association board members.

Agricultural Liaison: Mike Rodia shared in regards to hive assessment registration fees, changing of the law to clarify any box except a nuc. A proposal is being prepared for submission to legislature for their review and adoption on this matter. He also addressed group about House Bill 2653, which again has to do with urban beekeeping in Oregon counties. In regards to this house bill, a committee will be drafting a set of guidelines by next spring. Mike plans on sending out a draft sample to each regional association president for review.

Old Business

OSBA Events Coordinator: Harry reached out to everyone present to help fill this vacant position. Jan Lohman has reached out to Oregon Master Beekeeper Program. Carolyn Breece responded with good news—members from their program are willing to help. People interested in helping manage or volunteers—in any form, PLEASE contact Harry Vanderpool or Jan Lohman.

Oregon State Fair: Oregon State Fair booth = let’s all work together to make it happen in 2017.

Regional Association Affiliation: The OSBA officers plan sending a drafted letter with examples and questions in regards to this fee to each regional association president to review and give feedback. We’ll have to delay invoicing until January. It was brought to our attention again = how we should compile a checklist for each regional group of what needs to happen yearly to meet all tax requirements, and so forth.

New Business

Research Donation to Oregon State University Honey Bee Lab: Oregon State Beekeepers Association has agreed to match all regional association funds donated for honey bee research up to $500.00—as voted on via e-mail. Harry asked all regional representatives to come forward today and let us know so we are prepared to present all donations tomorrow to Dr. Ramesh Sagili during the OSU Honey Bee Lab Research Update. Oregon State Beekeepers Association will present Ramesh Sagili a $20,000.00 donation to Oregon State University, Honey Bee Lab, for honey bee research thru the Agricultural Research Foundation. As voted on, in

Continued on page 13
**Oregon State Beekeepers Association**

**EXECUTIVE BOARD AND REGIONAL ASSOCIATIONS**

**North Willamette Valley**
Steven Coffman, 2540 Greenwood Rd S, Independence 97351; 503.838.2981

**South Willamette Valley**
Rita Ostrofsky, 541.685.2875; ostrofsky@pacinfo.com

**Cascadia Queen Breeders**
Meets quarterly; contact the secretary for information.
Chair: Paul Maresh
503.283.2060; pmaresh@spiretech.com
Vice Chair: James Hensel
Secretary: Ken Anthony
klanthony1@comcast.net
Treasurer: Tom Chester

**Central Coast Beekeepers**
Meets 6:30 pm, fourth Wednesday
Newport Library, 35 NW Nye St, Newport
Information: centralcoastbeekeepers@gmail.com
President: Rick Olson
541.997.3792; rolson2@attglobal.net
Co-Vice Presidents: Anne Schatz, Kathy Cope
Secretary: Becky Fain
Treasurer: Stan Scotton
Website: www.ccbaor.org; www.facebook.com/Central-CoastBeeKeepersAssociation

**Central Oregon Beekeepers**
Meets 6:00 pm (5:30 pm beginners’ corner), fourth Tuesday (except November)
The Environmental Center, 16 NW Kansas Ave, Bend
Information: contact@cobeekeeping.org
Co-President: Allen Engle
eaengle@bendbroadband.com
Co-President: Patricia Moreland
oregonpat@gmail.com
Website: www.cobeekeeping.org

**Coffee Creek Beekeepers**

**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: Betsy Fleming
Treasurer: Jane Oku
541.396.4016; janeoku1958@gmail.com

**John Day River Beekeepers**
Meets quarterly
President: Matt Allen
541.934.9101; apricotapiaries@gmail.com
Education Coordinator/Secretary: Liz Lovelock
Klamath Basin Beekeepers
Meets 9:00 am, last Saturday (except Nov/Dec)
OSU Extension, 3328 Vandenberg Rd, Klamath Falls
President: Paul Davitt
president@klamathbeekeepers.org
Vice President: John Wilda
vicepresident@klamathbeekeepers.org
Secretary: Judy Olson
secretary@klamathbeekeepers.org
Treasurer: Ray Rutler
treasurer@klamathbeekeepers.org
Website: www.klamathbeekeepers.org

Lane County Beekeepers
Meets 7:30/7:00 pm social, third Tuesday (except December)
Trinity United Methodist Church, 440 Maxwell Rd, Eugene
President: Max Kuhn
541.999.0744; t.maxkuhn@gmail.com
Vice President: Deb Elder
541.513.6734; dgdeb.elder@gmail.com
Secretary: Tamara Andreas
541.406.0244; tandreas6@gmail.com
Treasurer: Polly Habliston
541.461.0339; polly@uoregon.edu
Website: www.lcbaor.org

Linn-Benton Beekeepers
Meets 6:30 pm, third Wednesday
Corvallis Waldorf School, 3855 NE Highway 20, Corvallis
President: Steve Oda
541.745.7227; steve@lbba.us
Vice President: Everett Kaser
541.924.9214; everett@lbba.us
Secretary: Laurie Bowman
541.250.1006; secretary@lbba.us
Treasurer: Suzi Maresh
541.967.9607; suzi@lbba.us
Website: www.lbba.us

Oregon South Coast Beekeepers
Meets 6:00 pm, third Tuesday
OSU Extension Office, Fairgrounds in Gold Beach
President: Brad Remsey
330.980.6125; bradleeremsey79@aim.com
Vice President: Harvey Young
541.661.0031; fishawk51@hotmail.com
Secretary: Shelley Pottmeyer
shelleypottmeyer@yahoo.com
Treasurer: Barbara Fitts
541.698.0300; bgfitts@gmail.com

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
Website: portlandmetro.org

Portland Urban Beekeepers
Meets 7:00 pm, first Wednesday
Rose City Park United Methodist, 5830 NE Alameda, Portland
For information, e-mail: officers@portlandurbanbeekippers.org
President: Bill Catherall—503.572.6467
president@portlandurbanbeekippers.org
Vice President: Laren Leland
vice-president@portlandurbanbeekippers.org
Secretary: Simone Miller
secretary@portlandurbanbeekippers.org
Treasurer: Amanda Shaw
treasurer@portlandurbanbeekippers.org
Website: portlandurbanbeekippers.org

Southern Oregon Beekeepers
Meets 6:30 pm, first Monday
Southern Oregon Res & Ext Ctr
569 Hanley Rd, Central Point
President: John Jacob
541.582.BEES; john@oldsolenterprises.com
Vice President: Risa Halpin
rhalpin906@aol.com
Secretary: Kate Womack
602.321.6901; k8womack@gmail.com
Treasurer: Cheryl Housden
541.659.6654; chousden@earthlink.net
Website: southernoregonbeekeepers.org

Tillamook County Beekeepers
Meets 7:00 pm, second Tuesday (except December)
Fresh Cafe, 9120 5th Street, Bay City
President: Claire Moody
503.318.9149; claire@vanirmail.com
Vice President: Rick Stelzig
rstelzig@charter.net
Secretary: Kathy Cope
541.264.9222; beachwalkinlady@hotmail.com
Treasurer: Terry Fullan
503.368.9149; tfullan@nehalemтел.net

Tualatin Valley Beekeepers
Meets 6:00 pm, last Tuesday
Jessie Mays Community Hall, 30975 NW Hillcrest Street, North Plains (except December)
Contact: tualatinvalleybeekippers@gmail.com
President: Debby Garman
Vice President: Yvonne Shaw
Secretary: Laura Stein-Weidner
Treasurer: Julie Schmidkofler
Web: http://tvba.weebly.com/

Willamette Valley Beekeepers
Meets 7:00 pm, fourth Monday, Chemeketa Community College, Building 9, Room 115, Salem
President: Richard Farrier
541.327.2673; rfarrierfarms@gmail.com
Vice President: Mona Kanner
Secretary: Laura Evans
Treasurer: William Faller
Website: http://wvbahive.org
The Bee Line

BEE SCHOOLS & EVENTS

January 10–14, 2017: North American Beekeeping Conference & Tradeshow. San Luis Resort & Galveston Island Convention Center, Galveston, Texas. Mark your calendar. This is a joint conference of the American Beekeeping Federation, the American Honey Producers Association, and the Canadian Honey Council.

January 28: 1:00–4:00 PM. Beekeeping 101. Columbia Gorge Community College, Hood River. Registration: 541.506.6011. $35.00, paid to the college.


February 4: 9:00 AM–3:00 PM. Portland Metro Bee School. $50. Registration: Clackamas Community College.

February 4: 1:00–4:00 PM. Beekeeping 101. Columbia Gorge Community College, The Dalles. Registration: 541.506.6011. $35.00, paid to the college.

March 11: 9:00 AM–4:00 PM. Astoria Bee School. Clatsop Community College, Columbia Hall, Room 219. $25 per person/$35 for people arriving together. Bring a sack lunch.

March 14 (7:00–9:00 PM), 16 (7:00–9:00 PM), 18 (8:00 AM–NOON), and June 3: Tualatin Valley Beekeepers Association Bee School. Information: http://tvba.weebly.com/about.html.


REGIONAL NEWS

Note: For all groups, see pages 4–5 for meeting time and place, website, and/or contact information. All groups welcome visitors to join them at meetings! In addition, regional associations often offer opportunities for learning, many of which are posted on their websites.

Regional Representatives

North Coast

End of the year is Honey Tasting and election of officers for both the Tillamook Beekeepers and Central Coast Beekeepers. Tillamook had a good turnout for honey tasting. We had twelve (12) honeys for tasting. The average overall score of all twelve was 7.178 (on a scale of 1 worst to 10 best). Finishing in first was Don England with a score of 8.076. There was a tie for second between Garrick Gordon and Bill Dotson (with his 2015 honey). Finishing in third was Terry Fullan. Central Coast Beekeepers had only six honeys for tasting. The average score for all six was 7.03, again on a scale of 1 to 10. Mark Aiassa finished in first with a score of 7.75. Tied for second were Jim Parrish and myself. Finishing third was Pat Wackford. Becca Fain and Rick Olson brought some Manuka Honey for tasting. If you haven’t tasted it or read about it, I encourage you to do so. Claire Moody from the Tillamook County group provided pH testing strips for both clubs honey tasting. That sure opened my eyes to the acidity of honey. Rick brought his refractometer for testing moisture content as well as his Honey Flavor Wheel.

As far as elections the Tillamook County beekeepers elected Claire Moody president, Rick Stelzig vice president, Kathy Cope as secretary, and Terry Fullan as treasurer. I want to give a special thank you to Bob Allen who has graciously served as president for many years. If it were not for Bob, the club may have actually died. Nothing can express our gratitude to Bob for all he has done for the Tillamook County Beekeepers Association.

The Central Coast Beekeepers elected Rick Olson president, Anne Schatz and Kathy Cope as co-vice presidents, Becca Fain continues as secretary, and I will serve as treasurer. Nancy McDowell will serve on the board as past president. At the meeting a special award was given to Becca Fain and Rick Olson for their service to the Central Coast beekeepers. I want to say thank you to Anne Schatz and Nancy McDowell for their service as co-presidents this last year. Thank you to all the volunteers of OSBA and its regional associations.

South Coast

Election was excellent! It was downright ideal in the SW corner of this area of the USA. Three members volunteered to serve for the first time as OSCBA officers and were elected, free of any political activity. (The one who first offered to serve as secretary was elected president!) 2017 Officers now include President Brad Remsey of Port Orford and Vice President Harvey Young of Brookings, both of whom attended the OSBA conference for the first time this year. Shelley Pottsmeyer, who along with husband Ken does the design and machine embroidery of the logo for OSCBA, was elected secretary by a very grateful membership. Barbara Fitts loyally continues to serve as treasurer and OMB program instructor. The Fitts and Pottmeyer couples reside in the Gold Beach area, near the meeting place.

Thanksgiving meeting also included lively discussion about highlights of the OSBA conference along with the potluck feasting, which featured the luscious turkey provided by

Stan Scotton
outgoing president and secretary, Jim and Lynne Sorber, who both also attended the conference.

Yellowjackets continue to be a major concern for future honey bee survival in this area. Some hope for a feature topic on the subject at the next OSBA conference. One of the members had heavy loss to these marauding predators, and several other members noticed that their queens were hunted down and killed first before ravaging the colony.

“After several mild winters,” says Carla Fletcher, overseer of the OSCBA programs for queen rearing and the OSCBA Educational Apiary, “this year the greatest challenge to beekeeping that many of us were dealing with were yellow jackets. The 4 out of 10 queens that were lost were due to yellow jackets. I suspect yellow jackets are a greater issue to those of us who live in rural locations with forest nearby rather than in agricultural or residential areas.”

Betsey Fleming of the Coos County group says that the officers remain the same for 2017 and reports, regarding the queens that they purchased from NW Queens as part of the shared project, that only two of the eleven survived and the other nine all died or flew away. Carla reports that she and husband Jesse Fletcher raised and distributed several daughter queens from the program and adds, “Assuming that some of these queens survive the winter, we will go forward with the plans to help get daughter mite-biter queens out to as many folks who would like to work with them. There will be no cost for replacement queens to those who lost their queen.”

Oregon South Coast members are looking forward to the dynamic perspectives of the new officers, and are pleased that several members are participating in the OMB program, along with continuation of local classes and mentors.

Mureen Walker

Regional Associations

Lane County Beekeepers
Our last meeting of the 2016 season was held in November and was our traditional “Honey Tasting” meeting where members bring samples of their liquid gold for tasting. It is a time where new beekeepers have the opportunity to learn that honey doesn’t taste the same throughout the area. The club divided the honey into location of the colony. These enabled tasters to learn that different areas of the county have amazingly different flavors due to the particular floral sources. Prior to the tasting, the LCBA held its election of officers for 2017. Elected were: President-Max Kuhn, Vice President-Deb Elder, Secretary-Tamara Andreas, Treasurer-Polly Habliston, Board of Directors-Kelly Goodwin, Francis Rothauge, Larry Scoville, Jim Rundall, and Mike France. During our January meeting, Dr. Ramesh Sagili will speak on “What is Happening in the Hive in January.” In addition, the club brings sandwiches and snacks to share with members at this first meeting of the year. We welcome anyone interested in bees.

Linn-Benton Beekeepers
Wishing you and the bees a Healthy, Happy New Year! At this month’s January meeting, Karessa Torgerson will speak to the questions of the “Pre-Keeper,” those who wonder about starting an intimate relationship with *Apis mellifera*, a bee-ing of complex beauty. Burning questions like: Is formal wear required on dates? How long before getting intimate? And what about the baggage — when do I deal with those tiny, tenacious sidekicks? Where does she want to live? Do I have cash reserves for a new roof, or that remodel for when the baby arrives in spring? What self-help books, group therapy, and birthing classes are available? Do we share a sense of humor?

At November’s meeting, Mike Rodia spoke about the Rose Hive Method and how he constructs and manages his colonies with it. Using same-sized boxes for both brood and supers, management possibilities are different from a hive made up of, for example, deeps (brood) and westerns (supers). With his years of beekeeping, he’s found various ways to save time, money, and materials. Mike was kind to share this list of tricks and inventions. Afterwards, some members shared their stories from the OSBA conference. This was our last meeting of the year.

Linn-Benton beekeepers board member Kristin Rifai completed her two-year term in December, and graciously declined reelection. Her skill set in leadership helped get things done promptly and professionally. Board election results will be revealed in February’s newsletter. Please wait with bated breath while we count . . . and re-count. Kristin, on behalf of the members of LBBA, thank you very much for your service!

Laurie Bowman

Portland Metro Beekeepers
Our December meeting/Christmas party was cancelled due to ice and snow. Welcome winter!! During January’s meeting, we will hold elections for new officers. We will also have a roundtable discussion on preparing for the winter months. We will review the past year and share what worked and what didn’t work. January is also a good time to take inventory of equipment and make any repairs. Let’s all
All good wishes for the new year!  

start off the new year committed to better record keeping!

We will co-sponsor a bee school with Clackamas Community College on the first two Saturdays in February [see Events, page 6].  

Patty Anderson  

Tualatin Valley Beekeepers  

Our monthly membership meetings have moved [see Regional Associations, page 5]. Board elections took place in November, and new officers are Debby Garman, president; Yvonne Shaw, vice president; Julie Schmidtkofer, treasurer; and Laura Stein-Weidner, secretary. We are very grateful for the service of the retiring officers!

The OSU Honey Bee Lab’s new Assistant Professor of Pollinator Health Andony Melathopoulos gave a splendid presentation on overwintering bees in November. At our first 2017 meeting, we’ll offer a free public screening of “More Than Honey,” a stunningly beautiful and fascinating film. Ramesh Sagili, Assistant Professor-Apiculture will speak at our February meeting. The 2017 Bee School dates are March 14, 16, 18, and June 3 [see Events, page 6].

Debby Garman  

For me, the biggest change in beekeeping over the years is how we manage the Varroa mite. Do this well, and you’ve gone a long way to becoming a good beekeeper.

It has been nearly three decades now that our bees have been infested with the Varroa mite, and yet it is still our number one problem (second in my book would be agriculture pesticides). Just a few years ago, it was recommended to treat at a 10–12 percent infestation rate; now it’s 1 percent in the spring, and 2 percent in the fall! – as suggested by Randy Oliver.

In 2012, I wrote the following which is as true today as then:

“Varroa control is still of preeminent importance. Keith Delaplane reported in January’s 2012 Bee Culture that ‘high levels of Varroa are associated with high levels of viruses and low populations of adult bees and brood.’ And Dr. Jamie Ellis states, ‘Left unchecked, even with the best cultural controls and genetic resistant stock, Varroa mites will eventually almost assuredly kill your colony.’”

The proverbial questions for all beekeepers: When to treat? How to treat?

When to treat is based on monitoring and sampling for Varroa mite infestation. The calendar is still very important. Randy Oliver has produced a nifty seasonal chart outlining times of the year to monitor. Please visit his site: scientificbeekeeping.com. You can find the map within “Basic Beekeeping” as Randy considers Varroa control to be basic. What I learned from attending the 2016 conference is that local beekeepers are treating their hives much more frequently for Varroa than at any time in the past. This may in part be because of our long brood-rearing seasons the last few years.

How to treat Varroa and not kill the bees? This is where it gets interesting. Most of our original mite controls are ineffective now, e.g., Apistan. For many years now, commercial beekeepers have relied on blue shop towels saturated with a solution of canola oil and amitraz. There are even strips now impregnated with amitraz called Apivar. It is my opinion that Apivar will hasten the already impending demise of the efficacy of amitraz. I hope this is not entirely true. For me, I have made a concerted effort to learn how to use other options. Randy Oliver lists these other options at his website, too, titled “NAME YOUR POISON” (under “Treatments for varroa control” in the “Basic Beekeeping” section). It, too, is a dynamic chart showing among things treatments that can be used at certain times of the year.

Randy’s top three treatment recommendations are: thymol, oxalic dribble, and formic. Here are my experiences with each:

**Thymol**
The first time I used thymol, I followed Randy’s directions to the T. I suffered my greatest loss ever because of it – nearly 50 percent of my hives were fried. It was like putting an M80 firecracker between the brood boxes and igniting it. Dr. Ramesh Sagili had similar results in studies he did. At our 2015 conference in Silverton, Randy touted 98 percent efficacy with Apiguard that past fall with no deleterious effects. Randy told me he no longer places Apiguard between the brood boxes but on top with a spacer. I suspect the formulation for Apiguard has changed? My recommendation: Experiment before wholesale treatment.

**Oxalic Dribble**
Oxalic acid is now legal (not that this has ever been a deterrent for beekeepers). It is cheap! It is really easy to use. Also on the horizon is the use of a new mechanism to apply oxalic acid via a vaporizing system. Formerly this was shunned in part for safety reasons (burning your lungs) and better results from the dribble method. This “new” system I heard about is quick and maybe more effective. I need to learn more.

**Formic**
I was a big fan of MiteAway II. It has been replaced by MAQS. After my experience with Apiguard (thymol), I was very hesitant to try MAQS, especially after reports of queen loss and excessive brood kill by local beekeepers. Then George Hansen piqued my interest in it again. At the last Seaside state meeting, he explained that he used it to get a quick mite knockdown before using Apivar (amitraz-impregnated strips). He also said he used a rim. Hmmm...

In August 2015, I experimented with MAQS. I was bold enough to experiment with all treatment configurations except two strips between the brood boxes – the directions. My unscientific opinion is, don’t use rims, don’t place strips on top, place one strip between the brood boxes, maybe two. I believe the formulation of this product has been dialed down. I feel comfortable using formic acid again with MAQS, especially one strip between the brood boxes. One caveat: At the 2015 Silverton meeting, Randy stated he suffered loss using MAQS. I did not inquire.

**Have you seen any small hive beetles?**
In the past three years, some of my returning hives from almonds have had small hive beetles. Then they disappear,
nowhere to be seen for the balance of the year. At the 2015 conference, I discussed this issue again with Gus Rouse, proprietor of Kona Queen Hawaii, and inevitably an expert on SHBs now. He believes, because of the high mobility of the small hive beetle, they’re already distributed to regions they find hospitable. One of the speakers at the 2016 conference queried the audience whether they had seen any Small Hive Beetles. I saw more hands than ever. I’ve had no hive issues, but if I had not arrested a brewing problem in my honey house it could have gotten ugly.

My advice: Always be on the lookout for them, and be prepared to change your management practices quickly to avoid any problems. For example, when I take off honey now, I’m very diligent that I don’t get any brood mixed into the honey supers, and I extract the supers immediately. I also do not store wet supers anymore. Maintaining bee space to all regions of the hive is important; for example, cramming nine frames into a deep plus a deep feeder smashed against the wall would be inadvisable. Smashing a pollen patty to the top of the hive without a spacer rim would be inadvisable.

Okay, here’s the rubber stamped January–February tips:

- Heft hives to find any light ones. After the shortest day of the year, brood production resumes and energy demands increase. Provide light hives emergency feed (e.g., fondant, drivert, sugar in division board feeders, frames of honey, pollen patties, etc.).

- February has historically been the time to treat for Varroa prior to supering. Monitor hives to ascertain Varroa infestation rates. Current recommendations are to treat if the infestation rates reach 1 percent in the spring.

- Likewise, February has also historically been the time to prophylactically treat for foulbroods prior to supering. While I no longer prophylactically treat for foulbroods, I keep a ready eye out for it. I have a five-gallon bucket of Terra-Pro, a terramycin treatment, at the ready if I have the slightest suspicion.

- Find and remove dead outs. When I find dead outs, I go through the equipment and do a vigorous cleaning, in part to facilitate frame manipulation. This is the easiest time to cull comb that is dark brown and rubbery hard, comb that has a preponderance of drone cells, or comb with signs of disease (AFB). Everything goes into dry storage to preserve the equipment for future use.

- Make periodic checks of your apiary, for example, after a windstorm, to make sure nothing is amiss. I personally use single bottom boards for most of the year, and each hive is strapped down holding the lids and bottom boards tight to the brood boxes. My lids can’t blow off. If you don’t do something similar, and you’ve taken a lid off recently for some reason, then the bees most likely will not be able to propolis the lid back down. The next windstorm may blow this lid off.

- In general, disturb the bees as little as possible.

### About that Digital Version of the Newsletter . . .

Many thanks to the 37 percent of members who have responded with a preference on receiving the newsletter as digital or print! Among the questions that have come up:

- **I prefer the newsletter as a pdf rather than the flip version. Will it still be available that way?** Yes, the pdf version will continue to be posted as it has been in the past.

- **How do I turn off the sound with the page turning?** You can turn off the sound on the toolbar at the bottom of the newsletter. There you can also search, print, zoom in, etc.

- **Can I change my mind about receiving a print version?** Yes, of course! Just e-mail osba.newsletter@gmail.com, and I will make the change.

- **Can I access the newsletter in digital form even if I receive a print copy?** Yes, the pdf version has long been available to all who are registered on the website. The flip version will be added.

- **Is the print version soon to be no longer available?** There are no plans for this at this time. A number of members do not have or have not provided e-mail addresses, and some are not comfortable reading online. That said, everyone has the option to print a copy from the digital newsletter for ease of reading, etc. This can be done from the toolbar at the bottom of the page.

- **I cannot access the website.** If you are unable to log in after registering on the website, the OSBA Internet service provider suggests that you consider clearing your cache and cookies in your browser, and perhaps reset your modem. If that fails, the provider suggests contacting your own provider. If you also contact osbawebmaster@gmail.com, I will do what I can to help.

- **Do I have to be registered/logged onto the website to view the digital version?** For the next issue or so, no. I will send a link to those who have requested it, as I did for the trial. It was done that way so that people who are not registered would be able to view it. Because the board voted that the newsletter is a benefit of membership, however, the real answer is yes. When the time comes, as is true now of the pdfs that are posted, once logged onto the website with username and password, you will have access not only to the current issue of the newsletter but also to back issues.
in congregations, others show primitive eusocial behavior. Their nest architecture can be quite elaborate.

Nomia, the alkali bee, so named for its nesting preference in alkaline soil, will nest gregariously. Alkaline soil beds have been made to encourage them to nest near alfalfa fields for pollination.

Megachilidae are the leaf cutter and mason bees. These bees have the scopa on the ventral side of their abdomen. They nest in pre-existing holes using leaf pieces if they are leaf cutters to separate larval cells in the holes. They are particular about what plants they use to make leaf pieces. Leaf cutters have been used in alfalfa pollination and are brought to the crop in summer.

Osmia or mason bees are an earlier-season bee and have been used in almond pollination. They use mud to separate larval cells. When not pollinating in large monoculture crops, these bees visit a wide variety of flowers.

The tunnel organization is usually female eggs laid first, as they emerge later than males. So the back of

Halictidae are miners in plant stems. Andrenidae are called sweat bees because when days are hot and humans sweat the bees will land on bare skin to lick off the salt. These bees have a diversity of social behavior. Some nest alone, others nest translucent substance. This lining gives them the name plaster bees. They also lack scopa on the outside of their bodies. Instead, they carry pollen back to their nests in their oral cavity or in their crop.

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the tunnel has female cells and the front of the tunnel has males. If the reverse occurs, males know to wait until the females have emerged. Apparently the females will kick the males in their faces if they try to emerge too soon. Note the mason bees are native to North America, but the leaf cutters used in alfalfa pollination come from Europe.

Apidae includes honey bees that are not native to North America. Some of our native species can collect pollen from plants that contain the anthers inside a special structure (like a salt shaker). Tomatoes and blueberries are a couple of these plants. The bees must be able to buzz or sonicate the flower to shake the pollen out. They use their wings to create the vibration and the pollen shakes out all over the bee and other parts of the flower. The pollen not on the bee can be collected by nonbuzz-pollinating bees.

Peponapis are the squash bees and are important pollinators of squash and gourds. Other Apidae include Euglossine, a long-tongued bee in South America, and carpenter bees that nest in wood in North America. Carpenter bees prefer old wood of buildings, but are not likely to cause structural damage.

The last story of the talk was enchanting and my favorite. It was about the mustache mud bee, *Anthophora abrupta*. This bee lives in the south and likes to nest in clay soil. Jim had responded to a homeowner who had discovered a lot of bees on his property. The homeowner was afraid and worried that the bees might attack neighbors and their pets.

A bare patch of nice clay soil near a corner of the house had attracted many female *Anthophora abrupta* to nest there. These bees not only excavate a burrow but also build a chimney-like structure over their excavation. Once it was explained that the bees were gentle and there was nothing to be afraid of, the homeowner began showing the bees to friends and neighbors. He would explain how the bees were making their home and providing their young in the tunnels with pollen and nectar. The bare clay patch became a neighborhood observation site where many learned about the mustache mud bees. What an insightful ending for the conference! Thank you, Dr. Skinner.
Dr. Elina L. Niño, from UC Davis Honeybee Research Facility was looking at the long-term effects of queen mating in terms of longevity and productivity of the mated queens, as well as changes in the effects of queen pheromones, which are important in regulating the behavior and physiology of the worker bees.

The comparisons were developed from using virgin queens, queens mated with 1 microliter of semen, and queens mated with 8 microliters of semen. The 8 microliter dosage was found to be the superior dosage for the quality of the inseminated queens; however, in their tests, the 8 microliter inseminated queens also had the shortest longevity.

In their study, they were to determine the queen reproductive quality. The queens in each dosage were surrounded by workers in a queen retinue, but that did not happen with virgin queens. In addition, the young workers picked up the pheromones from either the lower dosage or the higher, but the low dose insemination (1 microliter) showed more supercede attempts and tended to build more queen cells.

These studies have the potential to help beekeepers with their queen mating decisions in the future. There is still so much work to be done in this area of queen reproduction.

Dr. Elina L. Niño’s presentation at the conference on the queen was both fascinating and challenging. It truly makes you realize what the queen goes through in her path to parenthood as well as what queen producers face in their challenges of producing an exceptional product for beekeepers.

**WHAT MAKES A QUEEN TICK?**
-Jan Lohman-

OSBA 2017 Fall Conference: OSBA had a vote at the October board meeting for 2017 Fall Conference, unanimously agreed to the Oregon Garden & Resort. Harry again requested that if anyone finds a possible venue area, please present that information to the board for future event site considerations.

Election of Officers: Jan Lohman wanted to thank all board officers and all regional representatives for sending reports to Rosanna for *The Bee Line*. Jeff Milligan is stepping down from treasurer duties for 2017. Jan introduced two new nominees: Joe Hansen for Treasurer and Rita Ostrofsky for South Willamette Valley Regional Representative.

**Introduction of Oregon State Beekeepers Nomination Slate of 2017**

Oregon State Beekeeper Association Slate for 2017 is:

**Officers**
President: Harry Vanderpool  
Vice President: Jason Rowan  
Secretary: Mary Edwards  
Treasurer: Joe Hansen  

**Regional Representatives**
North Coast: Stan Scotton  
South Coast: Mureen Walker  
Columbia Basin: Bill Edwards  
Eastern Oregon: Jordan Dimock  
Portland Metro: Tom Cinquini  
Southern Oregon: Sarah Red-Laird  
North Willamette Valley: Steven Coffman  
South Willamette Valley: Rita Ostrofsky

Jan asked for a motion to accept the officers as Jan stated. Charlie Vanden Heuvel made a motion to accept. Seconded by Jeff Clark. Motion passed.

Next Jan introduced and asked each regional representative to stand. Then asked for any nominations from the floor for regional reps. Motion to accept regional representatives as stated. Pam Leavitt made a motion. Seconded by Francis Rothauge. Motion passed.

Francis Rothauge made a motion to adjourn. Seconded by Mike Rodia. Motion approved. Meeting adjourned at 5:59 PM.

Respectfully submitted,  
Mary

**Note:** With the exception of the report that follows, the minutes from the October 28, 2017, OSBA Executive Board are quite similar to those from the General Membership Meeting provided here. Please e-mail osba.newsletter@gmail.com if you would like to receive a copy of these minutes also. Thank you!

**Grants & Fellowships:** Jan announced received, honey bee survey grant from APHIS = $7,000.00. Jan reviewed other fellowships: NW Apiculture Fund, Ag Research Foundation, OSU Apiculture Fund, & the Scullen Fellowship Fund. Anyone interested in donating, Jan can answer questions & help direct funds towards bees and research.
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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.

Please send check made payable to OSBA with a completed form for each individual to:

Oregon State Beekeepers Association, Membership
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Note: To renew or join online, please visit: http://osba2016.orsba.org/product/osba-membership/

Thank you!

Effective Date: 12/10/2016
The Bee Line
Newsletter of the Oregon State Beekeepers Association
4207 SE Woodstock Blvd Ste 517
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Keep some room in your heart for the unimaginable.
—Mary Oliver

Reminder: The date on the mailing label is the expiration date for membership. If the date is January–February 2017 (or earlier), this is your friendly renewal notice.

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, interviews, recipes, points of view—and ads/advertising—to: Rosanna Mattingly, The Bee Line, 4207 SE Woodstock Blvd Ste 517, Portland OR 97206; e-mail: osba.newsletter@gmail.com. It's your newsletter—we want to hear from you!

The next issue to be printed will be the March issue, 2017. The deadline for submitting copy is February 10, 2017. Please let me know if you find difficulties with the deadline so we can work out the space and timing for the material.

Thank you!

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