



The Bee Line

Newsletter of the Oregon State Beekeepers Association

Volume 44
Number 2
March 2019

Selecting for the Hierarchical Trait Mite-Biting

Krispn Given



IN THIS ISSUE

Mite-Biting Behavior	1
President's Message	2
Board Meeting Minutes	3
Keeping Bees in March	5
Swarm Call Note	5
Bee Events	7
Regional News	7
Tribute to Fred Mann	13
Board & Affiliated Assns	16
Membership Form	17

orsba.org

OREGON STATE BEEKEEPERS ASSOCIATION
orsbawebmaster@gmail.com

OREGON MASTER BEEKEEPER PROGRAM
A Joint Venture of OSBA and the
Oregon State University Extension Service
info@oregonmasterbeekeeper.org

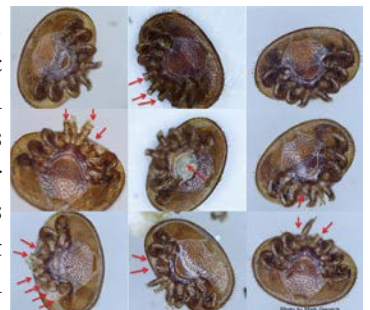
Image above: Krispn Given (right) with Greg Hunt in Ohio visiting a breeder with the mite-biter bee strain exhibiting the grooming behavior his lab has been selecting for since 2007. May all bees and all keepers of bees have the best of seasons as we move on into 2019.

The breeding population was established in 1997 from diverse sources, including queens from commercial queen breeders: some Carniolans from California breeders and one each of VSH and Russian colonies from Glen Apiaries. But many of the colonies in the population were those that had survived for years without miticide treatments. Each year the population consisted of about 100 colonies. It was not a closed breeding population. Occasionally, queens from other Midwest queen producers or feral colonies were introduced. Queens were all marked with paint and records kept of supercedure events. Initially, breeder queens were either instrumentally inseminated or open-mated. Daughter queens were open-mated in two mating yards one mile apart and isolated from all but a few other beehives by two miles. They contained selected drone-producing colonies with one or two frames of drone comb. From 1997 to 2006, breeder colonies were selected based only on low mite-population growth as measured by two to three counts of mite fall on sticky-board sampling sheets during the Spring and Summer.

Beginning in 2007, we began selecting for mite-grooming behavior. For the early years, we treated colonies with miticide if Varroa levels were too high (usually >100 mites falling in a day late in the season). For the past six years, no mite controls have been used, and we do not split the colonies very often so there are minimal breaks in the brood cycle, which would reduce mite levels. Breeder queens were selected based on the proportion of mites that had damaged legs or an apparent bite in the body (the *idiosoma*) of the mite. To measure the proportion of chewed mites, plastic sampling sheets were sprayed with vegetable oil and slid underneath colonies that had screened bottom boards (Country Rubes, Grass Valley, California) and left for two or three days. Using enough vegetable oil makes it fatal for the mites and also for any ants that might try to feed on them. Mites were carefully removed from the sample board using a small paintbrush and placed belly up (ventral side) in rows on microscope slides. If fewer than 10 mites were present, the data were recorded but not used for selection decisions. The number of mites on sticky boards was recorded, slides were examined with a microscope (15X), and the number of mites missing legs or leg parts or showing mutilation of the *idiosoma* was counted. Pale immature mites were not examined because these could have fallen as bees emerge from brood cells and may be more susceptible to damage unrelated to grooming behavior.



A typical mite-biter queen.



Mites that have been chewed by the mite-biters.

Sometimes empty shells —the *idiosoma* with virtually no contents—were observed. These were not counted because we do not know their cause. The relative severity

Continued on page 14

MESSAGE FROM THE PRESIDENT

By the time this reaches you, our colonies will be expanding the brood nests in earnest and almond pollination will be well underway. It will be very interesting to see what this winter's colony loss rate will turn out to be statewide and nationwide. Preliminary reports are pretty dire, and this is not a surprise given the reported season-long high mite counts by both hobbyist and commercial beekeepers alike. I would wager that our industry will exceed last year's annual average loss rate of 40 percent. Just as Harry predicted in his last "Message from the President," this trend spells trouble for our industry. How long can our industry sustain losses at this scale? I do not have an answer to this question, but beekeepers tend generally to be a resourceful and resilient lot.

The awareness of the essential role of honey bees in our food production system continues to grow, but in my opinion still remains underappreciated. This is an area in which I think our association can play a vital role. We have done well as a group fighting restrictive beekeeping ordinances, supporting research, and spreading best-management practices. What else can we do?

Those of us who make our living keeping bees would be well served to understand and act upon an economic principle known as the Price Elasticity of Demand (PED). In a nutshell (or should I say an almond hull), PED is a measurement in the change in demand for a good or service relative to a change in its price. An elastic demand curve for a good or service shows us that demand for a given commodity is very sensitive to a change in price of that commodity. Thus, when the price goes up for a given good or service, demand tends to decrease, and conversely when the price goes down for the same good or service, demand increases. Many commodities have an inelastic or relatively inelastic demand curve, meaning that demand does not fluctuate much with price. These tend to be goods or services for which there are no readily available substitutes. Clearly, pollination services would fall into this category. Let's take almond pollination as an example. In order to maximize yields and obtain crop insurance, almond growers must rent at least 2 hives per acre. Proper stocking of hives per acre can make as much as a 90 percent difference in crop yield. Almond trees are a long-term investment, and there is currently no substitute for commercial pollination services. Unless the honey bee supply drastically increases overnight, beekeepers could substantially raise rental prices and demand would fluctuate very little. In short, they cannot do it without us, and we should and could charge more for our services. This is not about sticking it to the growers. Farming is a tough sport no matter what one grows, with plenty of uncertainties from water, weather, pests, to tariffs. However, honey bees will never get the respect they deserve unless we charge what they

are worth. We tend to be our worst enemy in this regard. Perhaps, if pollination prices were significantly higher, growers would stop using untested tank mix partners. This is especially important given recent studies showing fungicides, long thought to be relatively safe for bees, can increase the toxicity of other pesticides 100X: digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1363&context=entomologyfacpub. There are also recent studies showing common herbicides negatively alter the honey bee gut microbiome. For an interesting read on the subject, check out: www.sciencedaily.com/releases/2018/09/180924174506.htm and www.gotscience.org/2018/02/honeybees-attracted-common-fungicide-herbicide/. Higher rental fees will make replacing annual colony losses much easier and allow us to more easily fund research and timely inputs into our operations to reduce annual losses. Steeper rental prices will also incentivize all stakeholders to go to great lengths to protect pollinators and fund research to a much larger extent.

We should also continue to encourage hobbyists to participate in the master beekeeper program and to join their regional associations. These are some of the most valuable tools we have for preventing mite bombs and spreading awareness about best management practices. The trend in backyard beekeeping continues to grow, and this can be a good thing if and only if good animal husbandry is practiced at large. Anomalous post treatment mite infections continue to plague our industry.

I would also like to encourage our members to support movements that create quality substantial pollinator habitat, specifically dual-use solar culture, also known as *agrivoltaics*. This is an exciting opportunity to work with utility-scale solar companies to farm large tracts of land for pollinator habitat. This model offers a long-term solution for keeping land in legal farm use while simultaneously creating high-quality bee forage. To that end, I would like to thank Dr. Rodia for his indispensable testimony at the the last Department of Land Conservation and Development hearing. There are some very restrictive rules being proposed that will severely limit where these solar projects will be allowed to develop and create pollinator habitat on farm land. We are proposing that, when solar projects are cited on farm land, they remain in legal farm use and are managed for pollinator habitat. The deadline for written public comment is May 7 and can be submitted either by email or by snail mail to:

LCD.rulecomment@state.or.us

Rules Coordinator, Department of Land Conservation & Development, 635 Capitol Street NE, Suite 150, Salem OR 97301

In closing, I would like to thank all the volunteers past and present who help to make this such a great organization. Thank you for your valuable time and effort. We couldn't do it without you. May your colonies grow fast, divides be plentiful, and your flows be fulsome.

John Jacob

OSBA Executive Board Meeting January 11, 2019 ❖ Alpine, Oregon

New president John Jacob called the meeting to order at 4:10 PM at Alpine School, 25114 Alpine Rd, Monroe.

In attendance: Karen Finley (secretary), John Jacob (president), Joe Maresh (vice president), Joe Hansen (treasurer), Tim Wydronek (South Willamette Valley representative), Maarty Van Otterloo (Oregon South Coast association vice president), Kathy Cope (North Coast representative), Richard Temple (Portland Metro communications), Mike Rodia (OSBA agriculture liaison), Eric McEwen (Southwestern Oregon representative), Harry Vanderpool (past president), and Tad Buford.

Treasurer's Report

Joe Hansen presented the treasurer's report. Highlights: 2018 conference income was close to 2017, but expenses were higher—the Salem Convention Center site, catering, and our great speakers from Canada and the Southeast made for higher costs. Conference attendance was slightly down at 250 from a high of 350 two years ago. Treasurer's report was approved (Karen/Tim).

Minutes

Karen supplied a copy of Jan's minutes from last meeting in October. Minutes were approved (Harry/Maarty).

Regional Representative and Association Reports

Southwestern Oregon: Eric McEwen reported that warm weather has allowed members to spend more time monitoring their bees. Hives are heavy after the good forage weather last fall.

South Willamette Valley: Tim Wydronek reported that Linn Benton Beekeepers Association has the first half of the year's programs scheduled and lots of renewing memberships. Yellowjackets are still evident with mild winter weather. Expecting high nuc demand due to more people and more mite losses.

Oregon South Coast Beekeepers Association: Maarty Van Otterloo reported that temperatures above 50 are making for lots of bee activity and pollen is still available from coyote bush. Their association needs an insurance certificate for their meeting room at the library. He and Harry made arrangements to get it taken care of. This year the association is stressing treating, monitoring, and checking hives frequently.

North Coast: Kathy Cope reported that the Central Coast beekeepers are mostly focused on the upcoming Yachats Honey Lovers Festival in February. A new Tillamook president has made a great new website for Tillamook beekeepers.

Kathy made a point that the outgoing Tillamook president Claire Moody led the group to increased attendance from 12 to 50 and a membership of 90. Kathy asked for guidance/advice from other group leaders on how to outreach to beekeepers so they join.

Portland Metro Beekeepers Association: Richard Temple said Portland Metro beekeepers has 90 renewing members. They are still seeking a perfect meeting location. They outgrew space at the old location and are now at Clackamas Community College. The area is suffering the loss of Ruhl Bee Supply since Brushy Mountain bought them out, then fairly suddenly closed up. John Edwards (formerly of Ruhl) is regrouping, operating in West Linn and providing some product, services, and the bulk buying power for area beekeepers once offered through Ruhl. John has set up a site at hiveandgarden.com and can be reached by email at hiveandgarden@comcast.net. Mike Rodia said associations may want to invite John to spring meetings for an update and input on how he can be of service.

Agricultural Liaison Report

Mike Rodia said that five thousand copies of *Residential Beekeeping: Best-practice guidelines for nuisance-free beekeeping in Oregon* were printed, compliments of GloryBee. He has a thousand copies on hand and wants to make them available to the associations for bee schools/bee days. More printings can be made in future, and also the publication is downloadable. Karen will send a thank you to Heidi Jacobson/GloryBee on behalf of OSBA.

Mike also reported that a Marion County beekeeper was cited for having bees under an old Marion County law that is still on the books restricting keeping bees, chickens, etc. Mike appeared before the Marion County planning commission in November, and, though they had commissioners' support to address this, planning commission staff has seemed reluctant.

Grants and Foundations Report

Jan Lohman was unable to attend but sent on information about the status of three endowment funds managed by the OSU Foundation, which Karen relayed to the group.

Affiliated Associations

Jan is the current point person on the affiliated associations. She's in contact with them to get all their forms for OSBA. This confers them insurance coverage for events and meetings. The board discussed the lack of congruence in calendars for officers being elected, etc., and agreed it would be worth requesting that affiliated associations consider moving timing of their elections such that OSBA can get annual paperwork and the like squared away by December 15 each year.

Old Business

Website

Board tried hard to move forward with resolving an outstanding website swarm list issue from past meetings. Harry Vanderpool, Richard Temple, and Mike Rodia filled in the group about past concerns. After much discussion, the decision was to have the state website contain a swarm list section that will have some general info and a disclaimer/terms of service, then provide listed links to swarm lists to be maintained and governed by regional associations as they see fit. The board discussed the value of completing this change by mid-February, getting it up on website asap, and announced in the March newsletter since swarms will start happening by then. Maarty will draft the disclaimer language for state website. John's letter to groups will give them a heads up that they need a list and an address to link it to state website (at a minimum) and can vet as they see fit.

Board decided (Karen/John) to ask Rosanna Mattingly to estimate the cost to pay her to revamp/revise/replace current website as she sees fit and assure that she is willing and interested. Maarty motioned (Tim) that Board plan an email vote in February to approve this moving forward, depending on her cost, so that website work can be initiated prior to next board meeting. Tillamook and Lane County websites were mentioned as potential examples.

New Business

2019 Conference

Joe Maresh has paid for the reservation at the Florence Event Center in Florence, Oregon, for the October 25–27, 2019, OSBA conference. Both Florence and Eagle Crest Resort in central Oregon are reserved for the 2020 conference, and he proposes that the general membership be given the opportunity to choose between sites by vote at the 2019 conference. The Florence site is more affordable than Salem was, has nice acoustics, a Eugene-based caterer, and lots of places to stay. The Florence Event Center agreed to donate the corkage fee for banquet and will need a receipt for that donation. Speakers are being lined up and a luncheon panel program on queen breeding is planned. Joe Maresh has formed a committee comprised of himself, Joe Hansen, Carolyn Breece, Jan Lohman, and Paul Andersen to work on the program. They will keep the board posted on their progress by email. Joe Hansen said \$4,500 might be a cost guideline from OSBA for speakers/travel assisted with conference (high end). The Oregon Master Beekeeper Program will likely be able to help with speaker costs if also associated with their parallel program. Harry Vanderpool encouraged decisions on speakers to be made soon, as they get booked.

Agricultural PV Arrays

John pointed out that DLCD is working to finalize rules for

siting solar PV arrays on farmland. Mike Rodia will attend/testify at the January 24 DLCD public meeting on Ag PV in Salem to make sure the state beekeepers association has its hat in the ring on this controversial issue. He will make a statement regarding OSBA beekeepers' support for counties' ability to adopt provisions for dual use under the conditions that (1) one of the acceptable dual uses is that land is usable for honey bee apiaries and that planting be maintained for benefit of pollinators, (2) that land remain in agricultural use and not impair future ag use once the installations are removed, and (3) that solar farm sites are restored at the expense of the company for habitat beneficial to pollinators once the installations are removed. Proposed rules are on the DLCD website.

Health Certificate

John informed the group that he is exploring a route with Helmuth Rogg of ODA to make it possible for Oregon queen shippers to obtain required health certificate with help of the OSU Honey Bee Lab.

Next Meeting/Location

Next meeting most likely will be at Sowers Apiaries in Canby, in conjunction with the annual April bee day event held by Portland Metro beekeepers. Everyone present agreed the Alpine location was convenient as a future meeting place, probably for July, then October's meeting will be held at Florence.

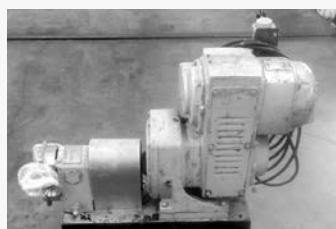
Harry motioned (Tim) to adjourn.

Respectfully submitted,

Karen Finley

ADDENDUM

An interim (electronic) vote was put to the OSBA board February 15 on two website issues. It was decided that regional associations will be asked to maintain a swarm list for their area and the links to these regional association lists will be included at the top of existing swarm list on OSBA website. A disclaimer will be added. And OSBA board authorized contracting with Rosanna Mattingly for completion of new updated website to replace existing site for a payment of up to \$4000.



St Regis 2R positive displacement pump with Sterling 1/2 hp variable speed motor & gear reducer, 220/440 volt, forward and reverse controls. Some parts missing, \$150.

Contact Julie Crooks
GloryBee, Eugene, OR
541-689-0913



KEEPING BEES IN MARCH

Jason Rowan

March marks the start of the beekeeping season for some of us. Up till now, a cursory glance at the entrance or taking a look under the cover is all we have done. Let's take a deeper look into the hives, shall we?

The beginning of spring gives us the opportunity to wipe the slate clean and get a fresh piece of chalk to start the new season. Mistakes may or may not have been made. Regardless, make note of what worked and didn't, and these can be tools to use in the season to come. Studying bee culture through books, meeting, or YouTube is a great way to prepare. Do your homework. Learning about what you are doing is the only way to be successful. During the month of March, I like to think of the hive as a garden and the work that I do now is the seed that I will watch grow for the rest of the summer. Take great care to stay ahead of your bees. It is the only way to help these creatures grow to their full potential.

First, let's unwrap the hive for the warm season to come. Take off all covering and insulation, including moisture traps if you desire. Hopefully, your hives are waterproof enough to make it through the spring rains. If not, leave the moisture traps on, but that does not excuse you from looking into the hives.

Pop open the lid and take a look. I would assume that you would wear all the necessary gear, plus smoker. Do things gently, move smoothly. There is no rush. Jarring and making bees fly when the temps are not optimal can cause their death or unneeded stress. Working bees when the days are dry and around 50°F is great, but you can check for weight even when the temps are much lower. You may be able to see the honey and determine that there is plenty or not. You may be able to take a stored frame and pop it in. If you have none, then a winter patty or some fondant may be used as an emergency feed. STARVATION is one of the ONLY things that you can control, so be responsible. You may want to try feeding a heavy syrup or a light syrup to simulate a flow. Putting pollen supplement on is a great way to get a jump start on the season, but know the costs. Every action causes a response in the bees, so think ahead.

If March marks the first time you have looked into your hive, you may have found it to be "deed." Fear not, you have just joined the rest of us who have found that to be the case as well. Bee keeping is a labor of love and cannot be marked by successes and failures. Just as your hives may have made it though the winter perfect for the second year, do not begin to believe that you have it all figured out. Being a beekeeper is a entomological journey into

the world of the wild. Our poor human brains can hardly begin to understand the complexities of the natural world, so don't beat yourself up. Learn from what has happened and move on with open eyes and mind.

Having said that, why has your hive died? Much can be learned and you can make the appropriate management changes because something clearly did not work. Get a good book or talk with other beekeepers about what you have seen, and you will find that the knowledge gained from those interactions can make a world of difference in the path of a new year. Clean that puppy out. Get rid of old drone combs and junky boxes. Start the year off right. Leaving your dead, AFB hive out to rot because you think you might catch that 100 percent disease-resistant free swarm is not a service to anyone, most of all the bees. Packages and nucs are getting built this month. Get ready. They are coming, so let's make it work.

If you are one of the lucky ones and your hives came through great, take a look inside. Make sure that hive has a queen. If not, add it to another hive if possible. If one of your hives is weak and one strong, move a frame or two over with brood and bees (no queen) and give it a boost, but mark her for re-queening.

Get those queens and supplies ordered and on their way. Don't be left out when things need to be done.

The last thing I would suggest for starting your garden off right is year is to be diligent about your pests and diseases. This may be a great time to treat for mites and brood diseases. Nontemperature-dependent mite control measures would be best. Please do not think that this is the last of your spring treatments. I have found more and more that the efficacy of most miticides has been greatly exaggerated. Bee aware and keep bees with care.

Happy Keeping.

A 2019 SWARM CALL NOTE

As stated in the minutes and addendum to the January board meeting, the board has decided that the swarm call listing is to continue as it has previously appeared and that affiliated association swarm call lists will be added, placed at the top of the page. The association links will be posted as they become available. For individuals, the 2019 swarm call listing will be open by the time you read this. It has been cleared, which means you will need to sign up again even if you registered last year and are interested in collecting from the same locations. We ask that you sign up for no more than ten locales this year. Thank you for this service to the public as well as the education you provide and your fine representation of the beekeeper community in doing so.

Happy New Year!

Specials!

6 5/8 Budget Supers

Same great quality and fit for a budget price!

1 - 49 \$11.65 ea

50 - 499 \$10.75 ea

500 - 999 \$9.00 ea

1000+ \$8.80 ea

Includes Free Shipping if by standard ground service.



For over 50 years, we have brought you the very best quality and workmanship in the beekeeping industry. For over 50 years we have used Ponderosa Pine and Western Red Cedar grown and harvested in the Pacific Northwest. For over 50 years we have been proud to say, **Made in the USA!**

Hobbyist Special

One pair Coveralls (S-XL)
One pair Economy Leather Gloves
Plastic Helmet & Folding Veil
\$72.00 (WWJAN01)



WESTERN BEE SUPPLIES

*We have assembled frames and boxes! Ask about **Free Shipping!***

PO Box 190, Polson, Montana 59860 406-883-2918 or TOLL-FREE 833-533-1014
www.westernbee.com Prices good through 2/10/2019



Bee packages on sale starting December 3, 2018

BUY YOUR BEE PACKAGES



WE OFFER:

- 2lb or 3lb packages
- Carniolan or Italian
- Marked or Unmarked Queens
- Nuc Boxes
- Demo Hives
- Packages starting at \$132.

2019 BEEKEEPING CLASSES:*

- **January 26:** Is Beekeeping Right for Me?, Free
- **February 10:** Ask a Beekeeper, Free
- **February 23:** Beekeeping 101, \$25
- **March 23:** Beekeeping 101, \$25
- **April 6:** Beekeeping 101, \$25

**Held at GloryBee Factory Store.*

Please call for pricing and more information.

Local Pickup Only: Friday, April 26, 2019 and Saturday, April 27, 2019 During Bee Weekend at GloryBee.



GLORYBEE.COM | (800) 456-7923

1% of beekeeping sales is donated to fund critical honey bee health research.

SaveTheBee.org





BEE EVENTS

March 9. Lane County beekeepers Bee School.

March 9. Tualatin Valley beekeepers Bee School.

March 9, 10 AM–4:00 PM. In the Hive. Barefarm, Camas Valley.
Information: phillthebeeguy@gmail.com, 503-349-8463.

March 9, 8 AM–5:00 PM. Flying Bee Ranch-20th Anniversary Open House! 5180 Lardon Rd NE, Salem.

April 20, 9 AM–3:00 PM. Portland Metro Beekeepers Association Bee Day. Foothills Honey Farm, Colton.

May 18–19: Oregon Honey Festival. *Information:* www.oregonhoneyfestival.com.

June 17–23: Pollinator Week. Let us know your plans!

June 17–23: Forest Grove Raise the Vibration for Bees. Some of the planned events will coincide with the Farmer's Market to make the 19th a very festive afternoon. We could really use some ideas and volunteers. Come and help us out! *Information:* Nancy Hertert at arrowhertert@gmail.com.

July 12–14: 2019 Western Apicultural Society Conference. Ashland. *Information:* westernapiculturalsociety.org.

July 17–20: 2019 International Conference on Pollinator Biology, Health and Policy. *Information:* honey.ucdavis.edu/pollinatorconference2019.

September 8–12: 46th Apimondia. Montreal. *Registration is now open:* www.apimondia2019.com.

October 25–27: Oregon State Beekeepers Association Fall Conference. Florence Event Center. Florence, Oregon. *Information as it becomes available:* orsba.org.

REGIONAL NEWS

Note: All affiliated associations invite and welcome visitors to join them at meetings. See page 16 for meeting time, website, and/or contact information. Many regional associations also offer additional opportunities for learning; they are posted on their websites as well as on orsba.org, under *Events*.

Regional Representatives

North Coast

Here on the coast the weather continues to be unusually dry and warm most of the time. Nights are cold, although I hesitate to even suggest that it's been cold here after what the Midwest just went through. Even so, I have heard beekeepers complain about moisture in their hives, and it looks like losses might be high this year. Both associations are gearing up for big events: the Yachats Honey Lovers' Festival in February and the Tillamook Home and Garden Show in April.

I am in the process of putting together a list of veterinarians along the coast who would be willing to see a beekeeper about antibiotics for his hives. The vast majority of these

vets don't know anything about these requirements yet and feel that they also don't know enough about bees to take part in that. One veterinarian, however, told me that, although she did not want to be on a list, she was willing to talk on an individual basis to patients of hers who had bees and needed medication. I'm guessing that's true of other vets as well. So, if you have a relationship with a veterinarian, let them know what is needed and expected of them. Hearing it from somebody they already know and trust might make a difference. I'm hoping over the next year, more will be added to this list as they become more familiar with what is required. *Kathy Cope*

Regional Associations

Central Oregon Beekeepers

In Central Oregon, we continue to have the interesting, challenging weather for our bees. February had a series of warm weeks followed by a couple weeks of cold weather. We're hoping there isn't a mass starvation after the bees were fooled by the warm weather into raising brood. We're also working on our dormant mite treatments. We should start seeing some crocus and willow pollen early March.

We had a great couple of interesting and timely talks this year. January's discussion was about emergency feeding from two of our Oregon Master Beekeeper journey students, and our February talk was on best practices in beekeeping from the OSU extension and OSBA, in preparation for starting the year. This year COBKA won't be conducting a Beginner's Bee School as we have over the last 12 years, but instead we will be covering topics during the beginner's corner prior to each meeting. *Allen Engle*

Columbia Gorge Beekeepers

New Year with new beginnings. An election of officers was conducted in the latter part of 2018 along with a survey of current members and nonmembers. Jerry Frazier was elected as president along with Vance Ellett, vp, Anne Gehrig, secretary, and Lisa Knapp, treasurer.

Speakers for 2019 were developed based on the survey results in hopes of addressing beekeeping concerns. So, our year is filled with some great guest speakers. We will continue to use the Extension Service, where we meet, with two hives for our premeeting demonstrations of differing facets of beekeeping. For instance, the February meeting had a demonstration of both nuc and package installations. March will include a demonstration on various methods of feeding both sugar syrup and pollen substitute patties.

Great discussions on the Columbia Gorge weather with several bouts of snow, sub-40°F sustained temperatures, and of course winds reaching 50 mph. Yet, the greater concern has been colony survival. 2018 ended with many hives still crashing from Varroa Destructor Mites.

Beeline Apiaries & Woodenware

See us for all your beekeeping supplies!

Woodenware	Bee Health Products
Foundation	Suits and Jackets
Tools	Books
	<i>Oxalic Acid Vaporizers</i>

Bee Packages and Nucs available in Spring

PH: 360-280-5274
Email: beelineofwa@norcell.us

Store Hours:

Open Monday – Friday 8 AM to 5 PM
Saturday -- By Appointment
Sunday – Closed
August – January Call

Store Address: 19019 Moon Rd SW Rochester, WA 98579



Beekeeping & Honey Bees
- Our Business Since 1863

Call our branch offices: Jeff in Fresno or John in Chico
for fast courteous service. *Free Full Color Catalog*

3914 N Winery Ave.
Fresno, CA 93745

Phone: (559) 495-0230
Fax: (559) 495-0232
Toll Free: 1-877-832-3268



15 C. Valley Ct.
Chico, CA 95973

Phone: (530) 893-0921
Fax: (530) 893-0922
Toll Free: 1-877-332-3268



YOUR SUCCESS IS OUR NUMBER ONE PRIORITY

Classes & Consulting
Locally Made Woodenware
Bee Suits
Medication & Nutrition



Shonnard's Nursery, Florist, and Landscape
6600 SW Philomath Blvd., Corvallis, OR 97333



Foothills Honey Company Is Now Taking Orders 2019 Nucleus Hives



5 Frames
2019 Laying Queen
Disposable Cardboard Box
(no box return/exchange)

Available after April 1, 2019

Pricing, Details, and Pickup Dates:
(503) 824-2265 | contact@foothillshoney.com

We stand by our product.

We look forward to another year of growth in our membership as the word continues to spread throughout our expansive area.

Jerry Frazier

Lane County Beekeepers

Having just attended the Washington State beekeepers conference near Spokane, it gives me a greater appreciation for the strength and success of the Oregon State Beekeepers Association. The Washington group did a great job of bringing together a widely diverse set of people to spend a day learning about and supporting honey bees. This was their first statewide event in a few years. With many years of experience hosting top-notch beekeeping conferences, Oregon should be celebrating their success and encouraging Washington as they start to grow their statewide conference again. Our Lane County association had Dr. Ramesh Sagili as our first speaker of the year at our January meeting. We always enjoy his updates on the OSU Honey Bee Lab research.

We have many great presentations lined up for this spring. Most months we have two presentations, including an early session. Our LCBA Bee School is a full-day class on

Saturday, March 9. We have many great presentations from beekeepers with a wealth of knowledge that come from years and years of beekeeping. If for some reason you cannot attend your local association's bee school, please see if the LCBA school will work.

Mike France

Linn Benton Beekeepers

Winter is now behind us and we are all looking forward to spring. Our association members have reported high winter losses this year. Members suspect it was due to the high mite counts seen over the last summer and/or queen failure. Whatever the case may be, now is the time to make sure that you have your nucs and packages pre-ordered. There is a shortage of bees this year, and many suppliers are selling out. March is a tricky month for beekeepers. The queen has been steadily increasing egg production and the brood nest is hungry. Many bees can starve this month as winter stores are almost depleted. If the bees cannot get out to forage due to weather, they risk starvation. Many of our members have now reversed their brood boxes and placed a pollen patty in between them to help offset depleted food stores. Mites are building up their populations with the increase of the brood nest as well. Time to think about what mite treatments to apply and splitting large hives.

On March 20, Ellen Topitzhofer will present information on "Brood Diseases." Our association welcomes our new board member at large, Dave Matis.


Bee Joke for the Month: "What do bees chew?"

Answer: Bumble gum.

Amber Reese

Portland Metro Beekeepers

Such a cold and wintry day! Such a change from a mid-to-late January, when bees began emerging from a mild winter thinking spring must be on its way. Those of us who keep hives at home versus sending them to California have been able to check them quickly or even delve a bit more deeply to check on hive health on the warmer and sunnier days. Since a cold snap has interrupted daily routines, now is a good time to review the past year, clean and repair equipment, continue to



FOOTHILLS HONEY

Honey and
Crop Pollination

George and Susan Hansen
30576 Oswalt Rd
Colton, Oregon 97017
(503) 824-2265
www.foothillshoney.com

Old Sol Apiaries

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



541.582.2337
oldsolbees.com

Selecting for productive, mite-tolerant queens since 2000

Bee Culture
The Magazine of American Beekeeping

12 BIG Issues
1 Beekeeping Calendar

All for \$25/Year Sign Up Online At www.BeeCulture.com
or call 800.289.7668, Ext. 3220

HEITKAMS' HONEY BEES



PAT, RUSSELL & CRAIG HEITKAM
4700 FIRST AVENUE • ORLAND, CA 95963
Bus. 530-865-9562 • FAX 530-865-7839
Email: queens@heitkamshoneybees.com

Queens, Bees, Honey & Pollination



**APR
13**

Bee Bash

**20
19**

BE A KEEPER

OH

**PACKAGE BEES
\$150**

MEAD TASTING • BEEKEEPING • ENTERTAINMENT

Honey Tasting • Vendor Booths

Beekeeping Demonstrations

Food & Music

SAVE THE DATE

Event Location

NECTAR CREEK FACILITY

PHILOMATH, OREGON

WWW.NECTARCREEK.COM

Pre-Order

PACKAGE BEES

530. 865. 0298

WWW.OHBEES.COM

FOR MORE INFORMATION: 541. 929. 2923



gain an understanding of best practices for hive management, and plan for the upcoming year.

For our January meeting, Kerry Haskins demonstrated his favorite method of making a candy board giving helpful tips and techniques for a successful board and maintaining safety during the cooking process, along with reasons for feeding over the winter. Other members contributed alternative methodologies of winter feeding to ensure their hives overwinter well; bees seem to be pretty accommodating as long as the basics are met. Mine seem to be happy with a mix of sugar and just enough syrup/honey-b-healthy to pack onto a plastic lid from a quart container.

Bee School at the local community college has begun, with the first classes on February 2 and 9. It is open to beginners as well as experienced beekeepers. The classes cover equipment, management, mite and disease treatment, among other key processes and techniques. Additional instruction, i.e., Bee Day, is scheduled for April 20 at the Hansens' in Colton, with planning in full swing now.

Our upcoming meetings will continue to address feeding and pollen, swarm capture/management, and introducing nucs and packages. This week may be winter, but spring is close on winter's heels!

Clackamas County Master Gardeners have forwarded a link to five videos addressing What Gardeners Should Know about Native Pollinators. Of course, honey bees have been included in the series. See: www.youtube.com/playlist?list=PLZEzoOaZqnfqWHt6VPD_xpFOv344iIZK1. It's an interesting series and takes a small amount of time to view.

Nancy Winston

Tillamook Beekeepers

The Tillamook Beekeepers Association is popping these weeks. We organized ourselves this year into six vibrant teams. We think of this new approach like a beehive. Everybody has a job, and the success of the whole depends upon everyone doing their part. No drones allowed, we say with tongue in cheek.

We have placed our raffle hive on display in the lobby of the county library which is drawing a lot of attention. This hive was handcrafted by one of our beekeepers, Rick Stelzig, and hand painted by Kathy Cope, a Lincoln City beekeeper. To see more of this incredibly beautiful hive, go to our website. The hive will be given away at the *Headlight Herald* annual Home and Garden Show to be held at the County Fairgrounds on April 13–14.

Education Team: On January 19, Claire Moody, our past president, taught a "To Bee or Not to Bee" class to 20 newcomers that was a great success. Our education team is gaining ground on a huge task of developing materials for our website's member's only education page. The public

education page is already ripe with tons of awesome data and embedded educational videos. The team has an ongoing effort with the county library to teach the public about honey bees. They created a display case in the main lobby of the library that has many very informative concepts and two digital picture frames rotating several dozen photos of bees and bee-friendly plants and flowers.



Purchasing Team: Our purchasing team is busy taking orders for NUCS, packages, and queens for spring delivery.

Foraging Team: Our foraging team is busy gathering plants for resale at the Home and Garden Show.

Community Outreach Team: Our participation at the Home and Garden show is just one of many events with which our community outreach team is involved.

Promotions Team: Our promotions team has made the *Headlight Herald* front page three times in the last four weeks. We are getting a lot of notice with such support.

Programs Team: Our programs team is busy scheduling guest speakers for our upcoming meetings. Ramesh Sagili or OSU is on the docket for March.

Brad York

Tualatin Valley Beekeepers

Tualatin Valley Beekeepers started off 2019 with a free showing of the movie "Queen of the Sun." The film included popcorn and was widely advertised to invite people interested in beekeeping to check out opportunities with TVBA—including the upcoming one-day Bee School on March 9 in Hillsboro, participation in a nuc buy, and shared honey extraction facility. The movie was well received, and attendance was about 100 people; many in the room were new attendees interested in beekeeping.

Our next membership meeting will feature a presentation and discussion of the new *Residential Beekeeping* best-practices guidelines.

Debby Garman

Willamette Valley

The Willamette Valley Beekeepers Association had its annual pizza social and elections. President is Rich Farrier, vice president is Mona Kanner, secretary is Anna Ashby, treasurer is Laura Evans, and member-at-large is Debbie Blando. Thanks to all the volunteers who worked so hard to make a great association in 2018. It sounds like there was some die off of members' beehives. The association is going to try to place a bulk order for nucs. There was some talk at the meeting as to how early some plants are blooming. January seemed to be to warm, and February



Proven Queens



Wooten's Queens & Bees, Inc., Steve Park Apiaries, Inc. & Wooters Bee Farms look forward to continuing to produce gentle, quality Park Italian queens with hygienic behavior and mite resistant traits that produce ample brood and large honey crops. Our continued relationship with the Bee Informed Partnership ensures we are selecting the highest quality Park Italian Queens that will be more tolerant of bee viruses, varroa mites, and nosema disease.

Our Beekeeping family wishes all of you the best in 2019!



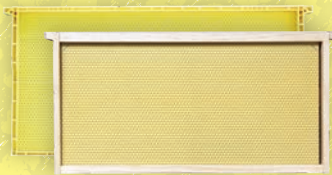
Wooten's Queens & Bees, Inc. | Steve Park Apiaries, Inc. | Wooters Bee Farms

Major Credit Cards Accepted | 888-565-8439 | orders@wootensqueensbees.com
www.wootensqueensbees.com



EVERYTHING FOR A SUCCESSFUL SEASON

FEEDS ♦ HIVE KITS ♦ WOODENWARE ♦ FOUNDATION ♦ EXTRACTORS
HIVE TOOLS ♦ MEDICATIONS ♦ SUPPLEMENTS ♦ GIFTS ♦ AND MORE!



MANN LAKE
WE KNOW BEES

800-880-7694
www.mannlakeltd.com

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

could still be cold and rainy. If so, that will certainly slow the plants down.

The association is going to continue its participation in Ag Fest in the end of April 2019. This is a great event to reach out and educate the public about bees and beekeeping. Thousands of grade school children and their parents come through the venue. The observation hive is the highlight of our booth.

Richard Farrier

TRIBUTE TO FRED MANN

Todd Bartlett

With the passing of Fred Mann on February 9, the Oregon beekeeping community lost an avid supporter and great friend. Fred was notable as a tinkerer, a master of swarm catching and bee cutouts, an indefatigable supporter of local bee associations, and, most of all, for his dedication to building and staffing the beekeeper booth at the Oregon State Fair.

Fred came to beekeeping rather late in life as he was in his 70s when he first accompanied his son-in-law to a Willamette Valley Beekeepers Association meeting in 2008. His grizzled beard and bright bespectacled eyes soon became a fixture at WVBA meetings—as well as Linn Benton Beekeepers Association meetings (where he served as a Board member) and as a Journey Beekeeper and mentor in the Oregon Master Beekeeper Program. Fred was a gentle, friendly soul with a heart of gold and was always available to engage others about his newfound passion for keeping bees.

Fred Mann loved to tinker, and you could always count on him to show up for bee association meetings with some new invention in hand. His ability to repair anything and everything made him a legend when it came to the State Fair booth. With his screw gun in hand, Fred could fasten, fix, take apart, or build anything. He became the master *go-to* person for fair booth setups and tear downs. Even well into his early 80s, you could find him hauling boxes or perched on top of a ladder during booth preparations. To top it off, then Fred would show up nearly every day during the 10-day run of the fair to greet visitors and talk bees with anybody and everybody.

Fred's fascination with catching swarms soon led him to his greatest passion, which was cutting out bees from all sorts of structures. Rather than just gathering "bees for free," he was even more excited when people paid him to cut out bees and honey comb from trees, houses, barns, sheds, chimneys, and churches. Beevac in hand, he soon became the premier bee cut-out artist in the mid-Willamette Valley. Nobody enjoyed cutting bees out of buildings as much as Fred, and he invariably would show up at bee association meetings with pictures of his latest conquests in hand. In addition to being paid for the bee removal, he was equally thrilled with the honeycomb

he was able to recover and took great pleasure in mashing up that comb to extract gallons and gallons of honey for sale.

In appreciation for all his hard work and support, his friends and fans in the WVBA presented Fred with the first and only Golden Screwgun award in 2015. They also composed and recited "Ode to Our Fred Mann" with all association members joining together to chant the refrain:

Who's in demand . . . when swarms are at hand?

Oh YES he Can, he's our Fred Mann.

Who can cut a swarm from a wall . . . with no effort at all?

Oh YES he Can, he's our Fred Mann.

Whose face lights with joy . . . when he builds a better hive toy?

Oh YES he Can, he's our Fred Mann.

But don't ya think Fred with no beard . . . is still kind of weird?

Oh YES he Can, he's our Fred Mann.

Who is young at heart . . . no way an old fart?

Oh YES he Can, he's our Fred Mann.

Whose little red truck . . . seems to bring us good luck?

Oh YES he Can, he's our Fred Mann.

Whose patience and calm . . . makes bees and beeks get along?

Oh YES he Can, he's our Fred Mann.

Who lends a hand . . . when others just stand?

Oh YES he Can, he's our Fred Mann.

Who's always there . . . when you need a repair . . . and at the State Fair?

Oh YES he Can, he's our Fred Mann.

Whose screwgun of gold . . . is a joy to behold?

Oh YES he Can, he's our Fred Mann.

Fred Mann was one of a kind and will be sorely missed by all who knew him, but we're pretty sure he's up in heaven right now searching for bees to cut out and honeycomb to mash.

Bonnie King

My first year as the OSBA state fair activities director was made so much easier through the kindness and generosity of Fred Mann. His enthusiasm was unmatched. He really cared about sharing the excellence of honey bees with everyone. Several times he told me the story of when he first met my dad, Alan Ehry, and what that meant to him. He quickly became close to all of my family. We were supposed to meet in March to plan the 2019 fair booth, and I'm so sorry he won't be at my side this year. How lucky was I, though? Getting to know Fred was a great gift. Fred's positive attitude and awaiting smile will be sorely missed. RIP, beekeeper.



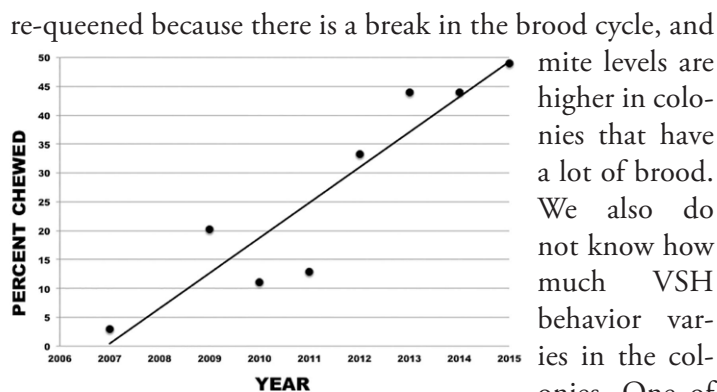
Mite-Biter Selection—Continued from page 1

of mutilations was also scored as low, moderate, or high, meaning most mites had multiple legs chewed and bites to the idiosoma were seen. Selection was hierarchical, which means that we first selected colonies with the highest proportion of chewed mites that were highly mutilated. We secondarily selected for low mite-population growth and colony strength over the season. Colonies were re-queened if they had high mites or had chalkbrood or other brood diseases. A hygienic behavior test was usually performed on potential breeder queen colonies, which were required to show at least 95 percent hygienic removal of freeze-killed brood within 24 hours (Spivak and Downey 1998).

In 2009, selection was based on the results of laboratory grooming assays for mite removal as well as the proportion of chewed mites in a colony (Andino and Hunt 2011). Beginning in 2010, we tested all of the colonies at least two or three times per season for the proportion of chewed mites, and each breeder queen was instrumentally inseminated with semen from multiple drones from one or two selected hives. During 2013 and 2014, we tested for correlations between mite drop and the proportion of chewed mites. Because of a mistake that was made in 2014, the total number of mites was not counted in colonies that had more than 70 mites falling on the sampling sheets but the proportion of chewed mites was recorded for a sample of 70 mites. There were seven of 56 and 19 of 63 colonies in this category for May and August measurements, respectively.

Evidence that Grooming Reduces Mite Populations

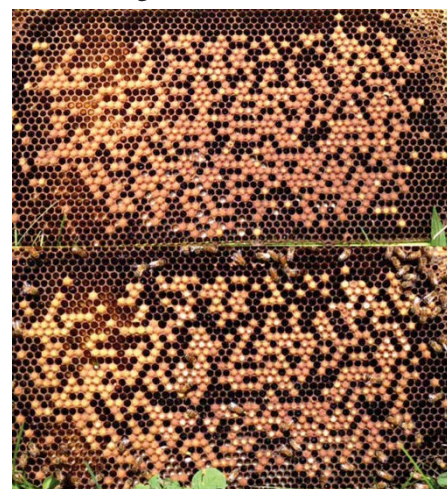
On the two sampling dates in 2014, we observed a significant inverse relationship between the proportion of chewed mites and mite drop, suggesting that grooming behavior is effective in reducing mite levels. We were not sure whether to include colonies that dropped fewer than 10 mites or the colonies that had 70 or more (reported as just 70), so we analyzed the data with and without these colonies. In general, colonies with fewer mites on sticky boards had higher proportions of chewed mites. Although we always saw a trend in this direction, the correlation was not statistically significant in 2013. During 2013, there was high variation in mite levels. There were 13 out of 42 colonies in June that had less than 10 mites falling on the sampling sheet, but five had 122–277 mites falling during the same three days. By August, the variation in mite drop among hives was even higher. It is possible that when mite populations get too high that grooming behavior is insufficient to control population growth and the proportion of chewed mites is lower as a result. One difficulty in finding a relationship between mite-biting and mite levels in our colonies may be that they are not uniform in size and in colony history. For example, mite populations decline when a colony is



Response to selection for chewed mites. The average proportion of chewed mites increased steadily in the breeding population.

mite levels are higher in colonies that have a lot of brood. We also do not know how much VSH behavior varies in the colonies. One of our grafting sources in 2014 exhibited this trait by removing mite-infested brood within 48 hours. It maintained low-mite populations and had a high proportion of chewed mites dropping on the sticky board. But, in general, the 2014 results suggest that grooming is effective at reducing mite levels, at least when the mite population is not too high.

Evidence of Varroa-sensitive hygiene (VSH). A drone comb infested with Varroa mites was inserted into one of our recent breeder colonies for 48 hours. This figure shows the *before* (top) and *after* (bottom).



Honey yields were estimated based on reports from 14 beekeepers over both years. Making the assumption that a medium depth super yields 30 pounds of honey and a shallow yields 20 pounds, commercial-source colonies produced an average of 11.7 pounds compared to 52.1 pounds for hives with Indiana queens, a 40.4 pound difference. Most colonies did not produce surplus honey the first year, so most of the yield difference was caused by differences in survival. But there were also some differences in colony strength. Relative colony strength was reported in 12 cases; hives with Indiana queens were rated stronger for eight, weaker for two, and equal strength for the other two.

Eight beekeepers reported on Varroa mite levels for both types of queens during 2014 or 2015 using powdered sugar shakes, alcohol washes, or sticky board sampling. One of these beekeepers reported a lower mite count in the commercial-source hive (two-thirds of the Indiana mite-biter level on a sticky board a month after introducing queens). Two beekeepers reported no mites in the Indiana colonies,

but found either six mites (powdered sugar shake) or 147 (sticky board) in the commercial colonies. The other seven beekeepers reported that the commercial-source colonies averaged three-fold higher mite levels compared to those with mite-biter queens (2.7-fold higher for the eight comparisons).

Of the 11 beekeepers who stated a preference, 10 chose Indiana mite-biter queens over commercial-source queens in this blind comparison. One of those that preferred the mite-biters was comparing four pairs of queens. Two beekeepers mentioned that the colonies with Indiana queens were more defensive. One of these two said that the Indiana hive was slightly more aggressive than the other hives, but that he preferred it because it was more productive. The other said that the commercial-source hive had very high mite counts (tested with alcohol wash) and was dead by Christmas. On the other hand, the Indiana hive had lower mite levels in the Fall, which were further reduced after Winter, but was “extremely defensive” and had 20 frames of bees by July of 2015.

This experiment was limited in scope because it only compared daughter queens from five mother queens. We also did not compare the “mite-biter” queens to other Midwestern stocks, which may have similar or better survival. We have seen other stocks that have relatively high proportions of chewed mites and believe this trait can be selected for in any genetically diverse population of bees. We do not know if this trait shows genetic dominance. One test of this would be to take virgin queens of low-

biting stock and let them fly in our mating yard to see how their progeny do. There may also be environmental effects that influenced survival that had nothing to do with genotype or that interacted with genotype, such as exposure of queens to *Nosema* or virus, or the mating conditions. So, we can't make any strong conclusions, but the large difference in winter survival and the beekeepers' preference suggest that breeding for mite-grooming behavior in local stocks of bees will make beekeeping more sustainable in the North Central US. Stocks from this breeding program are being made available through the Heartland Honey Bee Breeders Cooperative. We think that it is important that queen breeders select for both VSH and grooming behavior in bees that have survived Northern Winters.

We are currently conducting another comparison study with three widely used commercial sources against the mite-biters thanks to some recent USDA funding. The preliminary results are in favor of the Indiana mite-biters. We will be publishing our results in *Bee Culture* and *American Bee Journal* soon, stay tuned.

Note: Krispn Given is Apiculture Specialist at Purdue University's Department of Entomology in West Lafayette, Indiana. He shared results of this research in “Selecting for Behavioral Resistance to *Varroa Destructor*” during the 2018 OSBA Fall Conference in Salem. An annual instrumental insemination class and a queen rearing short course at his bee lab fill up quickly. For information, see: extension.entm.purdue.edu/beehive.

Awesome Hand Painted Beehive for raffle

Handcrafted by Tillamook beekeeper Rick Stelzig and hand painted by Lincoln City beekeeper and artist Kathy Cope. Depicted on each side are the four seasons of the same scene.

Complete with 10 frames and foundations for each of two deep boxes, and two medium supers.

To be given away at Annual Tillamook Home and Garden Show April 14.

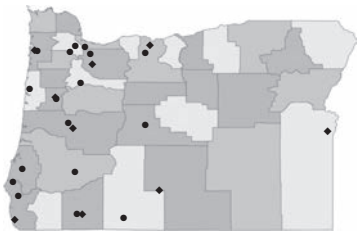


To purchase raffle tickets, go to:

www.tillamookbeekeepers.org



Oregon State Beekeepers Association EXECUTIVE BOARD AND AFFILIATED REGIONAL ASSOCIATIONS



OSBA OFFICERS

President

John Jacob—541.582.2337; oldsolbees@gmail.com

Vice President

Joe Maresh—503.703.5060; joemaresh@bctonline.com

Secretary

Karen Finley—541.753.4120; finleykk@yahoo.com

Treasurer

Joe Hansen—503.824.2265; osba.treasurer@gmail.com

Past President

Harry Vanderpool—503.399.3675; shallotman@yahoo.com

♦ OSBA REGIONAL REPRESENTATIVES

North Coast

Kathy Cope—541.264.9222; beachwalkinlady@hotmail.com

South Coast

Mureen Walker—541.425.0535; mureen.walker.111@gmail.com

Columbia Basin

Bill Edwards—541.354.2223

Eastern Oregon

Jordan Dimock—541.372.2726

Portland Metro

Tom Cinquini—503.547.5386; tomcinquini@gmail.com

South Central Oregon

Robert Clements—541.205.8562; kbbabees@gmail.com

Southwestern Oregon

Eric McEwen—541.415.5171; beetruehoneybees@gmail.com

North Willamette Valley

Steven Coffman—503.838.2981

South Willamette Valley

Tim Wydronek—541.740.4127; tim@aldercreekhoney.com

• REGIONAL ASSOCIATIONS

Central Coast Beekeepers

Meets 6:30 PM, fourth Wednesday, Newport
President: Jon Sumpter—jonsmptr@msn.com
Website: www.ccbaor.org

Central Oregon Beekeepers

Meets 6:00–7:30 PM, fourth Tuesday, Bend
President: Allen Engle—aengle@bendbroadband.com
Website: www.cobeekeeping.org

Columbia Gorge Beekeepers

Meets 6:15–8:15 PM, third Wednesday, Hood River
President: Jerry Frazier—jerry1.frazier@gmail.com
Website: gorgebeekeepers.org

Coos County Beekeepers

Meets 6:30 PM, third Saturday, Myrtle Point
President: Randy Sturgill—541.430.4095; randys@rfpco.com

Douglas County Bees

Meets 7:00–8:30 PM, first Wednesday, Roseburg
President: Ivory LosBanos—ivohart@gmail.com
Website: www.douglascountybees.org

Klamath Basin Beekeepers

Meets 9:00 AM, last Saturday, Klamath Falls
President: Paul Davitt—president@klamathbeekeepers.org
Website: www.klamathbeekeepers.org

Lane County Beekeepers

Meets 7:30 PM, third Tuesday, Eugene
President: Mike France—michaelj62@gmail.com
Website: www.lcbaor.org

Linn Benton Beekeepers

Meets 6:30 PM, third Wednesday, Corvallis
President: Everett Kaser—everett@lbba.us
Website: www.lbba.us

Oregon Prison Beekeepers

Program Manager: Chad.E.Naugle@doc.state.or.us

Oregon South Coast Beekeepers

Meets 6:00 PM, third Tuesday, Gold Beach
President: Jesse Fletcher—jesse.l.fletcher@gmail.com

Portland Metro Beekeepers

Meets 7:00 PM, second Thursday, Gladstone
President: Rex McIntire—503.720.7958
Website: portlandmetro.org

Portland Urban Beekeepers

Meets 7:00–9:00 PM, first Wednesday, Portland
President: Mandy Shaw—president@portlandurbanbeekeepers.org
Website: portlandurbanbeekeepers.org

Southern Oregon Beekeepers

Meets 6:30–9:00 PM, first Monday, Central Point
President: Risa Halpin—303.807.1830; rhalpin906@aol.com
Website: southernoregonbeekeepers.org

Tillamook Beekeepers

Meets 6:30–8:00 PM, second Tuesday, Tillamook
President: Brad York—dbradleyyork@gmail.com
Website: www.tillamookbeekeepers.org

Tualatin Valley Beekeepers

Meets 6:00–8:00 PM, last Tuesday, North Plains
President: Eddie Frie—ejfrie@frontier.com
Website: tvba.weebly.com

Willamette Valley Beekeepers

Meets 7:00 PM, fourth Monday, Salem
President: Richard Farrier—rfarrierfarms@gmail.com
Website: wvbahive.org



Oregon State Beekeepers Association Membership Application

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, 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
4207 SE Woodstock Blvd, Ste 517, Portland, Oregon 97206

Date: _____ New Member Membership Renewal

First Name: _____ **MI:** _____ **Last Name:** _____

Company name: _____

Type: Small scale (less than 25) Sideliner (25–300) Commercial (more than 300)

Mailing address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone number: _____ **e-mail address:** _____

Newsletter: Please select version: Digital Print **County:** _____

Membership Directory: The OSBA respects the privacy of members. Please indicate contact information to be included in a directory mailed to OSBA members only:

- Do not include contact information
- Share all information *OR* Share: mailing address phone number e-mail address


Local group, if member: _____

Membership dues: \$40 per person (\$50 per person outside the US) \$ _____


To renew online, please visit: osba2018.orsba.org/product/osba-membership. Thank you!

PENDELL'S CORDOVAN ITALIAN QUEENS

Ph: (530) 963-3062




**Mite
Resistance**




Gentle




**Honey
Producers**



VSH Trait







**Isolated
Mating
Yard**



Hygienic

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

Call 530-963-3062
fpendell@stonyford.com
www.pendellapiaries.com



Oregon State Beekeepers Association
 4207 SE Woodstock Blvd Ste 517
 Portland OR 97206
 orsba.org

Non-Profit Org. U.S. Postage PAID Permit No. 460 Portland, OR

To join or renew membership by mail, see form on page 17; online, go to orsba.org and click on Join OSBA!

— If the date on the mailing label is March 2019 (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 membership.

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 **April** issue, **2019**. The deadline for submitting copy is **March 10, 2019**. Please let me know if you find difficulties with the deadline so we can work out the space and timing for the material.

Be well!

Advertising

Per Issue

Event	Listing
All events, space permitting (15 words)	Free
For a nonprofit-group event , an additional 30 words (total of 45) in the listing or an article	Free
Advertising	
Business card	\$10.00
Quarter page	\$25.00
Half page	\$50.00
Full page	\$100.00
Classified Ad (30 words)	
Members	\$3.00
Nonmembers	\$5.00