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September 2019 LCBA Newsletter

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- **Saturday Sept. 21st: Northwest District Beekeepers’ Association Conference, Featuring Randy Oliver, Mr. “Scientific Beekeeping.com”**
- **Plus all October – December events for LCBA & our friend organizations...**

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Questions? Suggestions? Resources you’d like to share, stories you’d like to tell? Please contact LCBA Secretary Susanne Weil: secretary@lcba.community or call 360 880 8130.

UPCOMING EVENTS

Thursday, September 12: LCBA Monthly Meeting

Kevin Reichert & Cody Warren:

Fall Management for Winter Bee Survival

When: Social Time 6 – 6:30 p.m.; Talk & Q&A, 6:30 to 7:30; Break & Business Meeting, 7:30 to 8:45

Where: Centralia College, Walton Science Center 121, 701 W. Walnut, Centralia WA 98531

What: LCBA President Kevin Reichert and Mentorship Coordinator Cody Warren will review the things we need to do for our bees at this time of year to help them survive the winter. We'll cover what to look for during fall inspections, hive manipulations, moisture control methods, Varroa monitoring and management, & more. Please bring your stories and questions!



Above left, Cody shows workshop attendees how to fog a hive with oxalic acid; right, Caleb, one of our 2018 Youth Scholars, built his moisture control box at our workshop last year; we'll demonstrate how to make one again this year.

Saturday, September 14: Fall Management Workshop & Apiary Honey Spinning

When: 11 a.m. to 1 p.m.; **Where:** Please RSVP to secretary@lcba.community for address & directions. It helps us plan to know how many are coming.

What: Are your bees well prepared for winter - how would you tell? LCBA Mentors will go through hives to assess their condition & demonstrate Varroa treatments plus winter moisture control methods, including how to build a moisture control box. Please bring your protective gear! We'll have refreshments too. Last, but not least, we will spin the club apiary's honey after the workshop – if you'd like to help, or see how it's done, you are welcome.



Sunday, Sept 15: Free Home Orchard Class

Hosted by Raintree Nursery and Morton United Methodist Church, WA

When: 2 PM – 4 PM

Where: Morton United Methodist Church, 427 Main Ave, Morton, Washington 98356

What: This free class focuses on planting for pollinators! Local orchard enthusiast James Landreth will be presenting on how anyone can install an orchard on their own home property, providing fruit, nuts, and even animal feed for your family and community.

Contact information: (360) 894-2400; elderberryfarm@yahoo.com



Saturday Sept. 21st: Northwest District Beekeepers' Association Conference

Featuring Randy Oliver, Mr. "Scientific Beekeeping"

Where: Snohomish PUD Auditorium

Registration: Tickets for NWDBA members are \$20.00 and non members \$30.00 (plus fees). We will be meeting at the Snohomish PUD Auditorium. There is limited seating (300 guests) and we expect to sell out well before the event so if you are interested please sign up early: <https://www.brownpapertickets.com/event/4248173> . For the schedule and other information, visit: <https://www.nwdba.org/2019-nwdba-beekeepers-conference-announcement/>



Above, Italian Queen and her retinue (photo, Susanne Weil)

Thursday, October 10 - LCBA Monthly Meeting

Topic: Queen Rearing

When: Social Time 6 - 6:30 p.m.; Talk & Q&A, 6:30 - 7:30; Business Meeting, 7:30 - 8:45

Where: Centralia College, Walton Science Center, Room 121, 701 W. Walnut, Centralia WA 98531

What: Mentorship Coordinator Cody Warren & 2017 Youth Scholarship student Adam Claridge will report on what they learned at the WSU Queen Rearing class, followed up by Kevin Mills & Nancy Toenyan sharing their experiences in queen rearing. Discussion of queen issues that members have been experiencing, too: please bring your questions & stories!



When: 10 a.m. – 3 p.m.

Where: Seedpod Farm, 2330 Howard Ave, Centralia, Washington 98531

What: Each year, LCBA members Julie and Adam Gullett open up their farm for this family-friendly event. They invite you all to come check out “hard working vendors, fresh pressed cider, scarecrow competition, pick a pumpkin from The Patch...activities for the kids and honey tasting! Live music from Prairie Fire Band! Vendors welcome!”

Thursday, November 14 - LCBA Monthly Meeting

Topic: DIY Beekeeping Projects

When: Social Time 6 – 6:30 p.m.; Talk & Q&A, 6:30 to 7:30; Business Meeting, 7:30 to 8:45

Where: Centralia College, Walton Science Center, Room 121, 701 W. Walnut, Centralia WA 98531

What: Now that "active bee season" is behind us & bees are put to bed for the winter, beekeepers have time to think about new apiary projects for the year ahead. Members will share their cool fixes & ideas. Please bring yours!



Above left, Steve Howard answering questions about his top bar hive after he & Kevin Reichert assembled one at a 2016 LCBA meeting; right, Youth Scholar Damon Andersen with his bees, filling out a frame of honey (photo, Jessica Andersen)

Friday, November 15

2020 Youth in Beekeeping Scholarship Application Deadline

LCBA seeks young people who are interested in learning about honey bees. Eligible students who will be 6th to 10th graders in 2020 are invited to apply for our Youth in Beekeeping scholarship. Successful applicants get LCBA's beginner course free of charge, a mentor to help with their first year, and a loan of gear & bees: students who complete the service requirements keep gear & bees at year's end. For application forms and more information, visit LCBA's website (www.lewiscountybeekeepers.org) and click on Youth Scholarship Program.



Saturday, December 7

LCBA's 11th Annual Holiday Potluck

Where: Fort Borst Park, Kitchen #1, 2020 Borst Avenue, Centralia WA 98531. Kitchen #1 is on the left side of the road, just past the playground.

When: 3 to 7 p.m.: Schedule will be as follows:

3 - 4 pm: Social Time

4 - 5 p.m.: Potluck Dinner: What Should You Bring, Potluck-Wise? Please bring a dish of food to share, plus a plate, cutlery, & cup to eat/drink from. Please also bring a serving spoon for your dish. Borst Kitchen has tables & chairs, ranges, a refrigerator, & plug-ins for hot pots. LCBA will provide a ham, as well as coffee, tea, paper cups, & napkins.

5 - 7 p.m.: Fundraiser - Drawing for 2019 Youth Scholarship Program. If you feel so moved, please bring an item to support our Youth Scholarship Program! The drawing is a fun time each year, and you may take home some fun bee-related items! Also - our 2019 Youth Scholars & their mentors will share stories from their first year in beekeeping, followed by a brief business meeting.



Notes from LCBA's August 8th Monthly Meeting

Speaker: Dr. Dewey Caron

2018-19 Bee Losses: Learning from the Past

For Dewey's slideshow & data charts, visit our website & click on Monthly Meetings.



LCBA President Kevin Reichert welcomed Dr. Dewey Caron back to LCBA to share his survey data and management insights. Dewey noted that he would be back the following Saturday to give a workshop at our club apiary, following up on Erin O'Rourke's visit from WSU last month. Dewey reminded us that WSU offers us free sampling (just pay postage!) for Varroa mites, Tracheal mites, and Nosema: for information on how to prepare and send a sample, visit <http://bees.wsu.edu/diagnostic-lab/>

WSU and USDA Studies: Erin was not only sampling for WSU, but also for the USDA's honey bee health survey. For this she sampled Kevin Mills's, Dan Maughan's, and LCBA's apiaries. Erin sampled each apiary colony four ways: for live bees (Virus/Nosema), for bees preserved in alcohol, (testing for Tropilaelaps, A. cerana, Varroa load, and Nosema spores), pollen/wax, (testing for pesticide residue), and brood plus visual inspection. You can learn more about that project at <http://www.aphis.usda.gov/plant-health/honey-bees-survey>. Dewey noted that on average, a wax sample will have 5 different pesticides. LCBA's results will be available by the end of the month and will be reported at our September 12 meeting.

Do You Have an August Plan? Dewey asked us, are you ready for August? What is your mite count? September and October are the most critical months for testing and treating, but August is also important to prevent the mite population building up as the queens start laying less. Dewey got out a metal "steampunk" bee and put a red magnetic tag on it to show, proportionally, the size of a Varroa mite on a bee. Visual inspections are not effective, and yet they were the most-reported response in the survey for how people inspect. The pitfall of visual inspection, though, is that the mites usually do not lounge about on the back of a bee, but rather, work their way in-between the bee's abdominal segments.

Things To Do in August To Lessen Fall Mortality: Dewey suggested several methods for cutting down bee mortality in fall. However, August's Public Enemy Number 1 will likely be yellowjackets. Scavengers play an important role in our ecosystem, but they will find weaker colonies and keep coming back till they have robbed them out and broken them down. Hang traps, reduce entrances, and use robbing screens: these can help cut down yellowjacket attacks and bee losses. Also, this year in eastern Washington, a very large hornet with a nasty-looking stinger has been spotted.



Above left, yellowjacket robbing a honey bee hive; center & right, robbing screens deployed at the club apiary during Dewey's August 10 workshop.

At this point in the year, beekeepers remove supers and start reducing colonies down to two boxes. We hope that starting in September, the bees will force their queen down to the bottom box, then backfill the upper boxes with honey supplies. This is what bees *should* be doing in August, though it will depend on the available forage, strength of the colony, and so on. A frequently-asked question: can you leave *too* much honey on? Yes and no: Dewey tends to put an extra super underneath and then can rob from it to feed weak colonies in spring. Alternately, we can store a box of honey in the freezer and feed it back to bees in spring, when they will need food coming out of the winter.

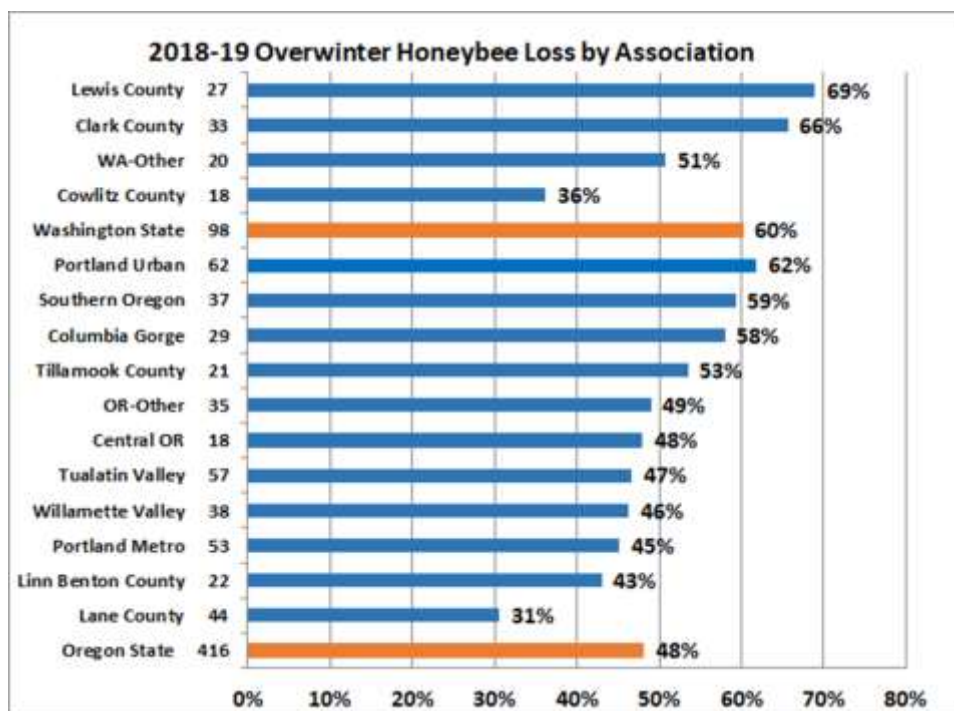
Other things to do in August include elevating hive boxes to avoid hungry skunks looking for a quick meal; be sure to avoid leaving hive detritus on the ground that can attract them and other predators. Finally, providing an upper entrance is helpful for the bees in terms of ventilation, as well as giving a 2nd entrance. As water sources dry up, supplying water is also helpful.

By the end of August, beekeepers need to make fall management decisions: to consider using a moisture trap: remember that the wood in the boxes can absorb moisture and add to the problem, so provide ventilation. Beekeepers need to consider whether the bees need to be fed, whether they need weather screening (hay bales, storm covers), and be sure to continue those mite counts!

2018-19 Honey Bee Loss Data: At pnwhoneybeesurvey.com, this year's data are available. As everyone knows, last year was rough. Of the counties surveyed, the average Washington state loss was 60%; Oregon average losses were 48%. In Lewis County, 27 respondents reported losses of, on average, 69% of colonies. Clark County had 66% losses. In contrast, Cowlitz County beekeepers reported 36% losses.

See chart, below, which compares winter losses in Lewis County with those of the state overall. Last year, LCBA was the top responder, but not this year. Bob Harris noted that many who have not responded may have lost bees and quit, so these data won't show them. Dewey noted that there were lower losses in top bar hives, but fewer top bar beekeepers reported, so it is hard to

judge whether the use of the top bar is a significant factor. In general, those with more bees had lower losses, with commercials having lowest losses. Statewide, beekeepers with more experience had lower losses, though this was not the case in Lewis County this year. Also, 8-frame hives in the survey did badly in Lewis County, but better statewide. Finally, Dewey looked at losses by origination of bees: only half of nucleus colonies in Lewis County were lost, a better rate than state-wide.



From pnwsurvey.com, where you can find more details.

The national picture is not much better. As the BeeInformed Partnership's data show, 2018-19 national losses were 40.7% (37.7% were winter losses; data chart was in the August Newsletter & can be found online: <https://beeinformed.org/2019/06/19/latest-loss-survey-results-2018-19/>). These are the second highest losses recorded in 13 years of doing the survey: only 2012-13 was worse. 2018-19 also saw 45% losses for commercial beekeepers, the highest ever recorded for that group.

Lewis County Survey Details: 5 of 29 respondents in Lewis County reported no losses; 11 lost all their colonies. More than half of those surveyed reported 5+ years' experience: both experienced and new beekeepers experienced severe losses.

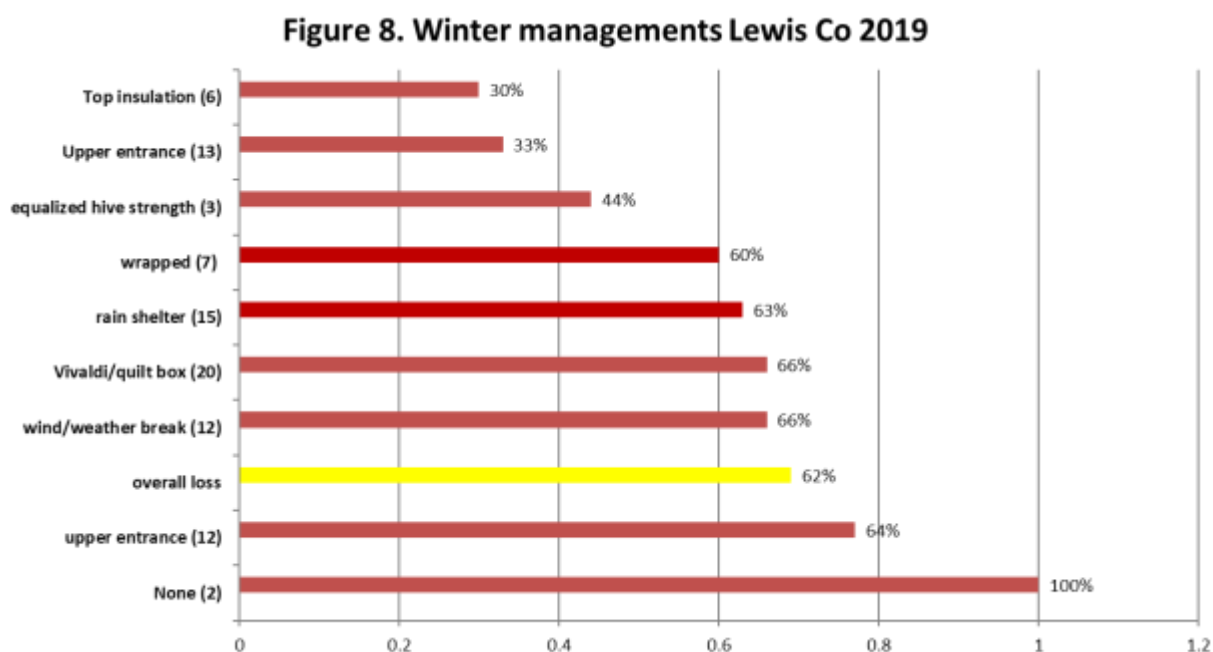
What do respondents attribute these losses to? Yellowjackets were rated as significant loss causes, along with colonies being weak in fall. Lewis County beekeepers thought that Varroa was less a problem than did beekeepers statewide. Yet the number one winter colony killer is Varroa. Dewey tends to think that beekeeping's future direction will be improvement in hygienic behavior in bees. Sometimes, when you look at a slider board, you will see legs of Varroa mites chewed off: that means the bees are on the job defending the colony.

Dewey recounted an old joke: if you adopt a dog from the pound and it dies, they might hesitate to give you a dog the following year; if you keep losing dogs, eventually the pound won't give

you a dog. Not so with bees. Some of us are very attached to our bees and not so familiar with farm life. As Bob said, “If you have livestock, you’ll also have dead stock.”

The key is not whether bees encounter a disease – it’s whether they are fit and healthy enough to fight it off. Dewey shared a link for a study from Bee Culture concerning this:

https://www.beeculture.com/catch-the-buzz-the-key-is-not-whether-they-encounter-a-disease-its-whether-they-are-fit-and-healthy-enough-to-fight-it-off/?utm_source=Catch+The+Buzz&utm_campaign=f7fb82ad53-Catch+The+Buzz+4+29+2015&utm_medium=email&utm_term=0_0272f190ab-f7fb82ad53-256239509 However, we must read between the lines, since the study focuses on established diseases – not exotics, and Varroa mites are exotics (invasive species).



Does winter feeding matter? One respondent did no feeding and lost all colonies. Those who fed pollen frames had lower losses, but those feeding pollen patties still reported 68% losses. Hard candy users reported 65% losses: overall, hard candy and dry sugar as feeding supplements succeeded a little better than the average in this sample. Liquid honey fed to bees, too, showed lower losses.

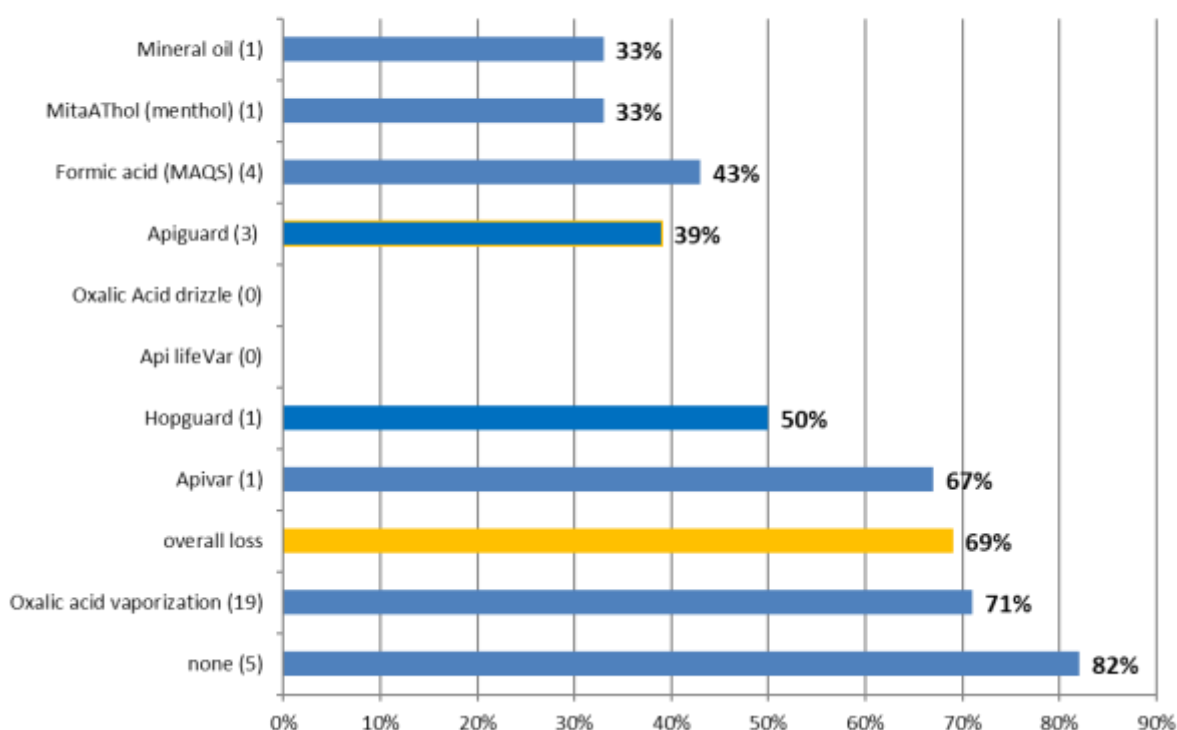
Does winterizing matter? Those respondents who did nothing to winterize lost all their bees. With top insulation on hives, losses were lower, an average of 30%. Also, upper entrances correlated with better survival: carbon dioxide buildup is toxic to bees, so we must be sure to give them air access when it snows. By top insulation, we mean slabs of moisture board, which Dan Maughan has demonstrated at past meetings: this is called “sounding board,” and you can buy it at Home Depot; it is different from the quilt box or Vivaldi board.

Sanitary management means doing things that avoid spreading disease between colonies in your apiary. Do you clean your hive tools, provide hives with distinctive colors, and spread out hives

to minimize drifting? Respondents who did these things reported lower losses, whereas those who did minimal intervention reported higher losses.

Non-chemical treatments: Screened bottom boards have many uses, but they do not seem to reduce winter loss. The most successful non-chemical interventions in our data set were: reducing drifting, requeening with hygienic bees, interrupting the brood cycle, and removing drone brood. Those who put in sliders did 10% better, on average, than those who reported that they did not use sliders. Finally, those who reported minimal hive inspection and powdered sugaring had the worst losses.

Figure 17. Lost rate using chemical mite treatments, Lewis Co 2019 () =number individuals



Brood cycle interruption: Caging the queen for 14 days can help, since for those 14 days, the mites will not have brood to lay eggs in; meanwhile, the queen is still giving off pheromones, so the colony does not experience itself as queenless. The cage needs to be large, like a frame size: not the little tiny boxes, which don't give her enough room. Bob asked if a queen's body is harmed by not being able to lay: Dewey commented that this has not been studied enough. Anecdotally, queens do survive and return to laying eggs, once released. Gottfried asked if the people who had removed drone brood just cut it out or used a special drone brood frame. He noted that if you let the bees draw natural comb, that will be a repository mainly for drone brood, so you can take your hive tool and scrape them out. The bees will refill that area with drone brood, and you go in and repeat the process. Dewey confirmed that mites lay three generations in drone brood; they can't easily raise young in the worker brood.

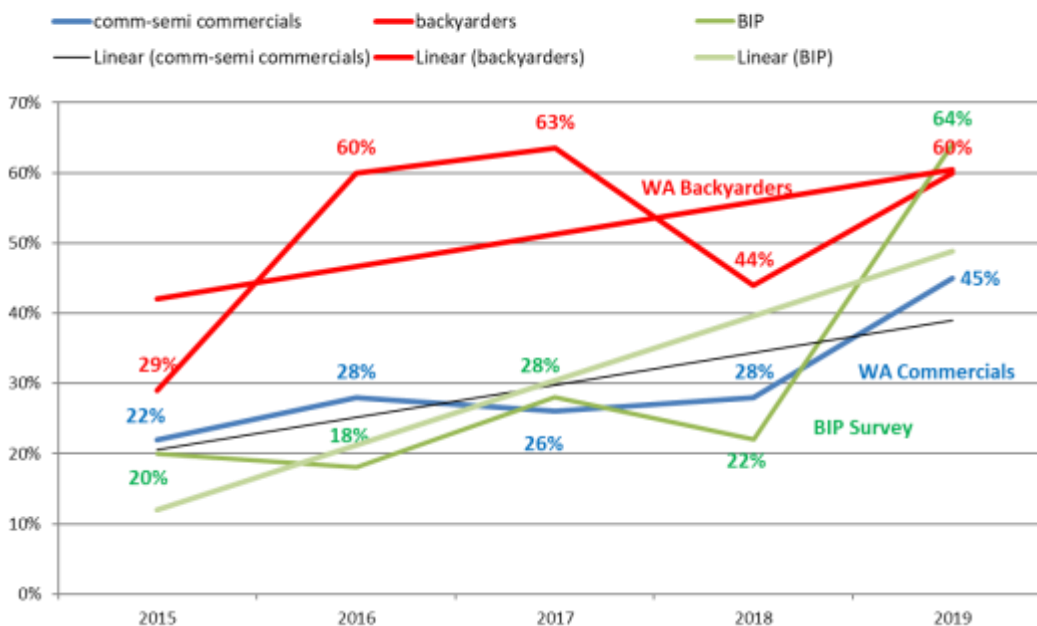
Chemical treatment: Those who reported no chemical treatments suffered 82% losses. Those using Pro-Mite, the successor to Mite-Away Quick Strips, reported 43% losses. Those using oxalic acid vaporization reported 71% losses. Dewey commented that in general, mineral oil fogging didn't help, but the one person in our data who did report using it had only 33% losses (hello, Cody Warren!). Dewey noted that any of these treatments are in part dependent on whether you apply them for maximum effectiveness: for example, oxalic acid vaporizing works best when there is a broodless break. If you do chemical treatments and use just one product, the mites can develop resistance, though this would take a number of years: it took three years to develop resistance to coumaphos. Dewey emphasized: Don't forget to read and follow the package directions when you treat!

Monitoring methods: Alcohol wash and powdered sugar mite drops were associated with the fewest losses. Sticky boards are not effective for monitoring if they are used alone: Dewey noted that sticky boards work best as a post-treatment check on mite drop. Finally, as noted earlier, visual inspection correlated with higher losses.

Resources: download the guide: www.honeybeehealthcoalition.org/varroa. The site also has short videos that show how to use these different treatments. There is even a "Varroa management tool" to help you make decisions: click on "decision tool."

Question: what do commercial beekeepers do differently? Dewey pointed out that commercial beekeepers are constantly monitoring their bees and treat them with about three different chemical treatments. They do lots of splitting and requeening. They treat with oxalic acid vaporization between Thanksgiving and the New Year, when no brood is present. These seem to be good methods to adopt.

Figure 5. Comparison of WA Commercial losses with backyard beekeeper losses, 5 years 2015-19



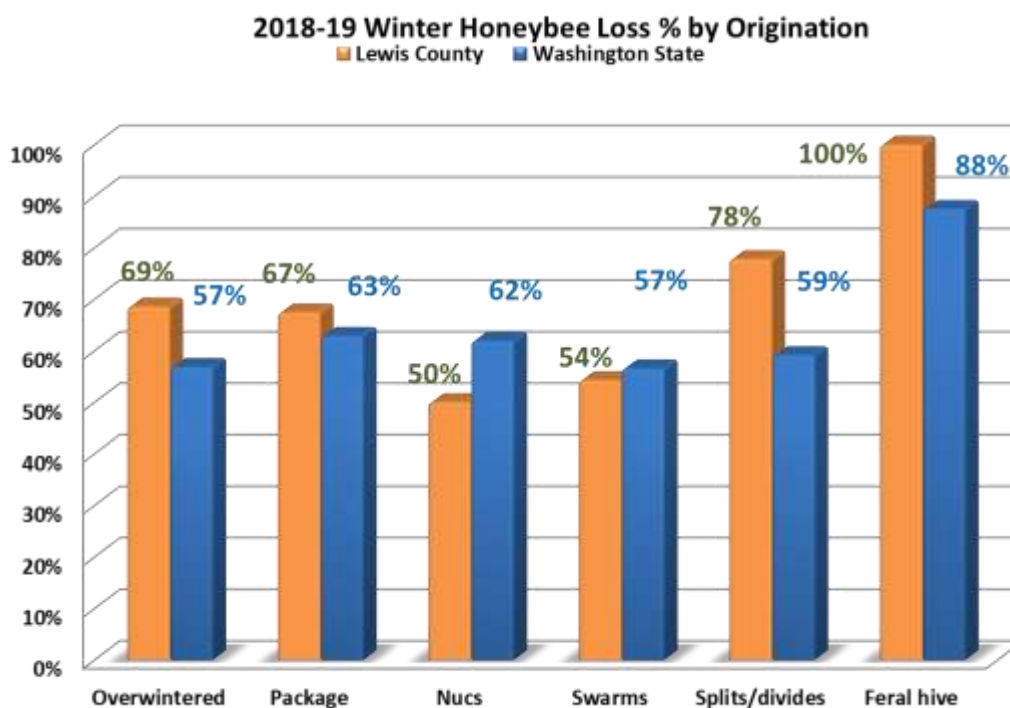
Eastern v. Western Washington? Bob asked how the regions compare. Is there an eastern county comparable to our size, and what are the differences in practices and outcomes? Bob also asked if Dewey thinks it is worth putting bees in shelters for winter (and wondered if that should

that be part of the methods surveyed). Washington, Dewey said, had 98 respondents and most were from I-5 corridor; very few respondents were from the east side; Oregon's pattern was the same. Bob suggested that it could be fruitful in future to look at loss data with the major variable being wet v. dry environments.

What is the best way to clean hive tools? Dewey recommends alcohol, Clorox wipes, or a portable torch. Whatever method you choose, the goal is to avoid spreading disease between colonies. This has not been much studied, so there's not much data. However, Dewey thinks that even if you only have one colony, you should clean your tool regularly. (Editorial note: would you brush your teeth with a used toothbrush?)

Queen Quality: Bob asked if Dewey thinks that the quality of queens is declining, as we tend to think? Dewey answered that all reports say anecdotally that it's true, but so far nothing conclusive has been presented. In Hawaii, four queen-rearers on the Big Island are trying to introduce Varroa-sensitive-hygiene genetics. We get many bees from Hawaii, but these have not been very effective, and honey production has dropped, so commercial beekeepers are not interested. However, they did get more hygienic bees, and the study is ongoing.

We all thanked Dewey for his informative presentation and Kevin reminded all present about the Saturday workshop. We took a break for folks to buy some of the books Dewey brought along, after which he went home to care for his four-year-old granddaughter's fish, "Senor."



LCBA August 8th Business Meeting

Treasurer's Report: LCBA Treasurer Rick Battin reported that LCBA's main account balance is \$9,004.58; the Youth Scholarship account balance is \$2,419.25; and our savings account balance is \$5,002.81

Youth Scholarship Program: Cody Warren reported that his mentee Damon is doing very well with his bees, which have built out 4 medium supers. Damon is also volunteering at the Fair.

Southwest Washington Fair announcements: Susanne passed around a sign-up sheet for volunteering at the Fair, and as of the end of the meeting, many had signed up. Also, Queenline jars (for the official Fair honey contest) and half-pints (for the People's Choice tasting contest) were available for members who wish to enter these contests.

August 10 Workshop with Dewey Caron: Reading the Hive

Follow-Up Comments By Dewey:



Above, Dewey at our club apiary discussing mite treatments.

Following the regular Meeting Thursday August 8 I had the pleasure to offer a Saturday workshop in the Lewis Club apiary. Although intended to be an intermediate level session, the majority of participants were relatively new beekeepers. We ended up keeping a very cooperative colony open for most of the workshop.

I demonstrated my standard method of opening and examining a bee colony. I first look around to see what might be happening or if there are “issues” that might need be addressed. The apiary has 8 and 10 frame colonies on common hive stands, some with supers and a couple of top bar hives. At 9 AM there was limited flight but pollen collectors were noted. After smoking the entrance, I removed the telescoping cover and then prepared to lift the top box from the lower. This time I nearly dropped the hive off the back of the hive stand.

Readjusting center of gravity, the top box was tilted back and we looked at the interface between boxes. There was very little (drone) brood between the boxes. No queen cells, but a couple of unused queen cups were seen. The box was heavy with stores. After replacing the box, the inner cover was removed – and subsequently set aside after underside was looked at to be certain the queen was not on the inner cover.



Dewey tilts hive for initial look below top box; right, Jessica watches Dewey prepare to pull frames.

I demonstrated how to use a hive tool (both traditional and maxant type) to remove frames. To reach the brood frames I started with removal of the 2nd frame on side of hive I was standing. It was mostly capped honey on outside and some honey, open cells of liquid (ripening honey/nectar) and some cells of pollen on inner side. This frame was hung on a frame holder and the next (3rd) frame removed – there was some capped brood and evidence the bees were backfilling cells (with liquid) from which worker adults recently emerged.

The brood pattern read was mixed – pattern was spotty, but this was on the outside of the brood sphere; brood amount seemed to be somewhat larger than basketball size, appropriate for the season. The backfilling was a normal preparation for overwintering. No eggs seen. Definitely need to look further in light of spottiness and lack of open brood.



Closeups of the hive Dewey discusses above; right, see the questionable larva.

Next two frames were mostly brood. Spotty pattern persisted but not as evident as on outside frame. Honey stores continued to be abundant, as where cells of bee breed. Close look at spotty brood showed some removal of pupal cappings (hygienic behavior) and some developing larvae with disease. Some EFB perhaps (twisted yellowing larvae in cells) and what is termed snotty brood (unknown pathogen – also termed IBDS – Idiosyncratic Brood Disease Syndrome). Not extensive. Eggs finally found but not in abundance.

We did a mite count. I showed collecting bees from brood comb (after first checking to insure queen not present) and also shaking frame into bucket and taking ½ cup of bees. Both alcohol wash and sugar shake revealed. The Honey Bee Health Coalition website describes and shows this in one of their videos [see link in Dewey's talk, above]. We found less than 2% - but this was essentially a post-treatment sample as bees had previously been treated with Formic Pro. A nice confirmation of treatment effectiveness. The sampling needs to be continued next month and again in October.



We discussed feeding (not necessary by our reading of this hive) and other potential issues before finally closing the colony. I reviewed the methods of treating – non-chemical methods such as drone brood removal would no longer work but we could have divided the hive (not necessary with the low mite count). I showed where and when and how chemical treatments could be used (again not needed due to treatment in July).

We adjourned for pizzas and discussion. A good day in the apiary. Thanks for the opportunity.

NOTE: Mite-A-Thon is a tri-national effort to collect mite infestation data and to visualize Varroa infestations in honey bee colonies across North America within a two week window. All beekeepers are invited to participate. **THE 3rd annual Mite-A-Thon takes place in a 2 week window September 7-21st!** Exactly when we should be determining mite counts for our bees will be rearing the bees that will rear the FALL overwintering (so called “FAT” bees). Healthy bees are a must so the fall overwintering bees are healthy too.

To participate monitor the level of mites (number of mites per 100 bees) using a standardized protocol utilizing two common methods of assessment - alcohol wash or powdered sugar roll.) and then enter data. Once you have mite counts from one or more of your colonies upload to www.mitecheck.com. You will also be asked location, total number of hives, number of hives tested, type of local hive habitat, and the number of Varroa mites counted from each hive. The published information will not identify individual participants.

LCBA at the SOUTHWEST WASHINGTON FAIR: HONEY CONTEST WINNERS & FAIR HIGHLIGHTS



This year's Southwest Washington Fair theme was "Happy as a Hen": we're not sure just how happy hens are, but Lewis County residents sure seemed happy to see LCBA back at the Fair! We had a comprehensive exhibit in the Floral Building that included a hive setup and other bee equipment, Steve Howard's top bar hive and explanatory booklet, Sharette Giese's "gifts of the hive" honey products display, Kimo Thielges' sample mason bee and bumblebee hives, plenty of "freebee" materials from the National Honey Board to give away, and, of course, our Observation Hive, which draws kids of all ages like a magnet. On the weekend, visitors not only got to see our display of judged honey, but also got to taste 18 different honeys at the People's Choice Tasting on the weekend.

Many thanks to our volunteers who helped set up our exhibit and loaned items for display, as well as those who staffed our exhibit through the week: Damon & Jessica Andersen, Rick Battin, Gordon Bellevue, Jan Buechler, Bruce Casaw, Sue Cook, Kay Crawford, Pamela Daudet, Gillian Davis, Art DeBusschere, Gottfried Fritz, Bruce Graham, Steve & Barb Grega, Bob Harris, Steve Howard, Gary & Judy Kalich, Jessica Lemanager, Austin Nelson, Don Nelson, Dave Roth, Susanne Weil, Phil & Mary Ellen Wilson, Walt Wilson, Erik Wingren, and especially Cody Warren for bringing in the Observation Hive each day, and Pamela Daudet and Kevin Reichert for coming in daily to make sure everything was running smoothly. A photo gallery follows the Honey Contest results....

SOUTHWEST WASHINGTON FAIR – THE HONEY CONTESTS



Above, Best in Class Honey Winners: left, Jessica Lemenager won in the Light Honey class, middle, Kevin Reichert won in the Amber Honey class, and, right, Steve Howard won the People's Choice Honey Tasting contest. Jessica is Steve's mentee this year.

Official Fair Contest Honey Judging Results

Twelve LCBA members entered their honey in the Fair's official honey tasting. LCBA Education Coordinator Peter Glover judged the honey by the criteria he developed in 2015 based on the Eastern Apicultural Society's guidelines (you can find these on LCBA's website under "Education"). The Best in Class ribbons went to Jessica Lemenager for her light honey and Kevin Reichert for his amber honey; both scored 99/100 points. Additional blue ribbons went to Pamela Daudet and Kenzie Anderson. Red ribbons went to Steve Howard, Kevin Reichert, and Walt Wilson, finally, white ribbons went to Lori Eades, Melissa Reiman, and Sarah Spogen. Sadly, one honey had to be disqualified for excess moisture content (over 18.6%), but it certainly tasted good....and was entered in the honey tasting contest. Finally, Melissa Reiman earned a blue ribbon for her meticulous cut-comb honey. Members who would like to see their "honey rubrics" can contact Susanne; they'll be available at our September meeting. Many thanks to all entrants: our honey display, ranged from white honey to dark amber, made a beautiful spectrum to display to the public and showcased LCBA members' good work.

People's Choice Honey Tasting

Once again, LCBA members gave Lewis County residents a special treat this year – a chance to taste a wide range of local, raw honeys. 18 entries were eagerly tasted and savored by literally hundreds of visitors who marveled that honeys that looked similar could taste so different, and that there were so many tastes they'd never encountered before (certainly not in a Safeway bear). 331 of these visitors cast votes for the ultimate bragging rights among beekeepers – the People's Choice Tasting Award! Steve Howard's creamed honey won 1st place with 31 votes. The breakdown of winners follows on the next page.....

People's Choice Top 10 Rankings:

1st: Steve Howard, 31 (creamed)

2nd: Kevin Reichert, 28 (marionberry)

3rd: Cody Warren, 26 (wildflower)

4th: Jessica Lemenager

5th, a 3-way tie: Peter Glover & Susanne Weil, Steve Howard, & Cody Warren

8th: Pamela Daudet

9th Steve Howard

#10 Gary Kalich

All the honeys received multiple votes. Thanks to everyone for playing!



Above, happy tasters (photo, Amber Phoenix Rushton)

Fair Photo Gallery starts next page....

LCBA at the Southwest Washington Fair – Photo Gallery



Above & below: visitors enjoying LCBA's Observation Hive



*Below, two of the many children who got their photos taken in Cody Warren's photo-board;
below, Cody seeking the queen in the observation hive.*





Above left, 4 year old Nova won a blue ribbon for her bee-autiful queen cell display; right, Melissa Reiman won a blue ribbon for her outstanding cut-comb honey entry. Below, left, people enjoying the various different parts of LCBA's exhibit; right, Steve Howard's top bar hive and accompanying educational booklet display won a Best in Show ribbon.





Above, the bees displayed their comb-building skills on the inside of the Observation Hive window: left, the build the bees had made by 10 one morning; right, what they'd done by 4 pm.



Above, the People's Choice Honey Tasting; below, LCBA volunteers relaxing during quiet times.



RECIPES OF THE MONTH from the National Honey Board

CRANBERRY-GLAZED SALMON



Ingredients for 4 servings:

- 1 cup - whole berry cranberry sauce
- 1/4 cup - honey
- 1/4 cup - soy sauce
- 2 cloves - garlic, minced
- 1 T - fresh ginger root, minced
- 1/4 tsp. - pepper
- 4 (1 1/2 lb.) - salmon fillets, skinless

Directions:

In medium bowl, combine all ingredients except salmon until thoroughly blended.

Place salmon in lightly greased baking pan. Spoon cranberry mixture evenly over fillets. Bake at 350°F for about 10 minutes or until salmon is cooked through and just flakes when tested with a fork.

NO BAKE CHOCOLATE PEANUT BUTTER ENERGY BITES

(National Honey Board)

Ingredients for 15 servings (each serving is 2 bites)

1/2 cup - peanuts, finely chopped
1 1/2 cup - old fashioned oats, divided
1/3 cup - flax seeds
1/2 cup - almond flour
3 T - unsweetened cocoa
2 T - peanut butter powder
2/3 cup - mini chocolate chips, divided
1/2 cup - peanut butter
1/3 cup + 1 T - honey
2 T - almond or soy milk



Directions:

Line a sheet pan with parchment or wax paper.

Place peanuts in a small bowl, set aside.

In a food processor, combine 1 cup of the oats, flax seed, almond flour, cocoa, peanut butter powder and 1/3 cup of the chocolate chips. Pulse several times until it resembles coarse meal.

Add the peanut butter, honey and almond milk to the oat mixture and process until the mixture comes together.

Transfer the oat mixture to a large bowl and mix in the remaining oats and chocolate chips, your hands work best for this!

Scoop out 1" clusters of the mixture and roll into a ball with your hands. Then dip the bites in the finely chopped peanuts. Place each ball on the sheet pan and chill in the refrigerator. When the bites are chilled and set, store in an airtight container for up to a week.

TIP: You can substitute the peanuts, peanut butter powder and peanut butter for almonds, additional almond flour and almond butter.

HONEY-BACON B.L.T. (National Honey Board)

Ingredients for 4 sandwiches:

12 slices - thick-cut bacon
 1/4 cup - honey
 1/2 tsp. - ground coriander
 3/4 tsp. - cayenne pepper
 8 slices - Sourdough bread, toasted
 8 tsp. - mayonnaise
 8 pieces - green leaf lettuce
 12 slices - Beefsteak tomato, sliced
 4 - eggs, fried to desired doneness
 1/2 cup - Avocado, mashed



Directions:

Preheat oven to 400° and line a baking sheet with parchment paper. Place bacon slices on prepared baking sheet.

Combine honey, coriander, and cayenne pepper. In increments of 20 seconds, heat in microwave until just melted.

Using a pastry brush, baste melted spiced honey over bacon slices. Flip and baste other side.

Roast for about 15 minutes until crisp (may be a bit shorter or longer depending on fattiness).

To Assemble:

On one slice sourdough toast, spread 2 tsp. mayonnaise.

Top with 2 pieces green leaf lettuce, 3 slices tomato, 3 slices Spicy Honey Candied Bacon, and 1 fried egg.

Spread 2 T avocado mash on second slice sourdough toast and place on top of sandwich to close.

Slice diagonally, serve.

To watch a video showing how to make this, visit: <https://www.honey.com/newsroom/video>

BEES IN THE NEWS

Thanks to Jessica Anderson, Gillian Davis, Steve Norton, Phil Wilson, and the good folks at Bee Informed Partnership, Bee Culture, and American Bee Journal for stories.



“Researchers at the University of Sheffield’s Institute for Sustainable Food are collaborating with industry to develop a natural, sustainable biocontrol which targets pests without harming honeybees and other beneficial pollinators,” *Bee Culture*, August 29, 2019

“Estimated global crop loss to pests – including insects, plant viruses and fungi – is around \$100 billion every year, equating to a 40 per cent loss in global agricultural production. A natural, sustainable alternative to pesticides that targets specific pests, without harming beneficial pollinators such as honeybees, is being developed with the help of researchers from the Institute for Sustainable Food at the University of Sheffield. Working in collaboration with industry partner and leading agricultural company, Syngenta, experts at the institute are helping to develop a pioneering biocontrol that uses dsRNA-based biocontrols to target plant pests.

There is a significant need for innovative approaches to crop protection, driven by the need for greater food production, pest expansion linked to climate breakdown and the push for more sustainable farming practices. . . . Professor Mark Dickman, from the Institute for Sustainable Food and Director of Research at the University of Sheffield’s Department of Chemical and Biological Engineering, led the study. He said: “The RNA biocontrols we are working on with Syngenta can help to address the sustainability challenge for farming. The idea is that dsRNA is applied to the crops, then along comes the pest, which eats the crop. The dsRNA molecule then kills the pest by triggering the RNAi mechanism. The advantage of this is that we can be highly selective. We have the ability to target a specific pest while protecting beneficial species, such as honeybees. A key challenge will be making enough of these biocontrols which are natural, biodegradable and sustainable, and to deliver them to the crops. We’re currently working on production strategies to make the RNA biocontrols and methods to analyze this important product.” To read the full article, put this address in your browser: DOI:10.1039/C9AN00954J

**“What the US could learn from Slovenia about protecting bees,” PRI International,
February 2019:**



Above, Gorazd Trušnovec, a professional beekeeper in Ljubljana, tends to the beehives on the balcony of the offices of the prime minister of Slovenia. Credit: Arno Friebe/Civil Eats.

For those interested in Slovenian Hives: Kay Crawford will talk to our group about her Slovenian Hive adventure, and next summer, the Slovenian Hive group is gathering in Onalaska!

“Bee colonies have faced massive declines around the globe, prompting doomsday scenarios of a world without these vital pollinators, but in Slovenia, such worries are almost unheard of. Colonies are thriving here, exemplified not only by the healthy hives the country’s top politician keeps, and the jars of honey he gifts foreign dignitaries....

“Wedged between Italy, Croatia, and Austria, Slovenia boasts about 10,000 beekeepers among its population of just over 2 million — about five for every 1,000 people. In the US, on the other hand, there’re an estimated 125,000 beekeepers for a nation of 327 million, or about 0.4 per 1,000 people. Many attribute this concentration of experts to the Slovenian people’s ingrained love for bees and honey, the country’s historic ties to beekeeping, and a government that recognized the benefits to the economy early on....

“In 2002, the government put the local honeybee—the docile, industrious Carniolan bee—under conservation status, which has helped raise public awareness and regulate breeding: To keep the Carniolan strong and relatively resistant to diseases, no other species of honeybees can be imported to Slovenia, and trading of the bees is regulated.

“While the beekeeping association and the government are hoping to see bees protected as an endangered species across the E.U., they have already managed to get the tiny pollinators honored with the first annual World Bee Day, which the United Nations recognized on May 20 last year—the birthday of Slovenian Anton Janša, the forefather of modern beekeeping. Janša,

who lived from 1734 to 1773, designed stackable hives, and became the first to teach professional beekeeping at the imperial court in Vienna in the 18th century. Ask any Slovenian about the country's love for bees, and they will tell you about Janša.

“For those wishing to follow in Janša’s footsteps today, the Slovenian government has set up training courses that ensure that future beekeepers have the necessary knowledge and experience to keep bees, such as the ability to recognize an infestation of pests like the Varroa, a deadly blood-sucking mite. (Such pests could quickly spread from hive to hive, beekeeper to beekeeper, and threaten entire beekeeping industries; this is already happening in the US, where the mite has spread rapidly since the '80s, affecting more than half of all hives.)

“Slovenia also distributes free medication and treatment to combat the mites. Should that not help, the government offers a full refund for infected hives, thus stopping the plague from spreading further.”

To read more, visit: https://www.pri.org/stories/2019-02-05/what-us-could-learn-slovenia-about-protecting-bees?fbclid=IwAR2H9Xvx-5ywJT2WlJMRVPaJMW1CuCKGN8zldUHKxiGIFsS_Wl5W5W4wlnM

“Microbes on the Menu for Bee Larvae,” ARS News Service, August 20, 2019:

“Bees only feast on nectar and pollen, right? Wrong. Turns out, Nature's famously busy insect isn't strictly vegan, after all. Reporting online in this month's American Naturalist, a team of Agricultural Research Service (ARS) and university scientists has shown that bee larvae (brood) have a taste for "microbial meat."



*Above, Newly hatched blue mason bee larvae feeding on pollen provisions within a hollow reed.
Photo Credit: Shawn Steffan*

“ARS entomologist Shawn Steffan and his colleagues at the University of Wisconsin, Cornell University, and Hokkaido University in Japan coined the term to describe an important ingredient in the brood's pollen provisions—namely, the protein of beneficial bacteria and fungi.

“The microbes are naturally occurring in the pollen and feed and multiply within it. In the process, they increase the pollen's nutritional value to brood by enriching it with amino acids—the building blocks of protein—that flowering plants alone may not always provide.

“Bees actually require the non-plant proteins of these pollen-borne symbionts to complete their growth and development—which makes them omnivores,” explained Steffan, with the ARS Vegetable Crops Research Unit in Madison, Wisconsin.

“In fact, the team observed an appetite for microbial meat among brood that spanned 14 species distributed across all major families of social and solitary bees—Melittidae, Apidae and Megachilidae among them.

“The microbes don't just serve themselves up as critical sources of amino acids, though. They also secrete enzymes that help break down and age raw pollen into a more nutritious and digestible form known as “beebread.” Nurse bees may recognize this benefit and encourage the microbes' growth in pollen fed to brood, note the researchers in their paper. This microbial mix-mash may also check the growth of harmful bacteria or fungi that can ruin beebread or sicken the hive....

“...[T]he team's isotope analysis showed that bee brood's consumption of both plant and microbial proteins warranted raising the insect's trophic status from that of a strict herbivore to an omnivore.

“More broadly, Steffan said, the findings underscore the need to examine what effects fungicide use on flowering crops can have on the microbial make up of pollen fed to brood and, in turn, their development.”

To read more, visit: <https://mailchi.mp/dadant.com/abj-extra-august-20-2019-microbes-on-the-menu-for-bee-larvae?fbclid=IwAR1z-C2LpE4BOXt3oJzvSCNo9maeO-bxM3poOeZvWuKDuS4B9OhmCRSULrE>



“A giant hive, weighing 50kg with 60,000 bees, was removed from a woman's house in Brisbane, Australia on August 22. Check out the video! <https://www.bbc.com/.../huge-beehive-discovered-inside-ceiling>

And Now . . . 20,000 bees hived into a cello, but do they make sweet music?



To see the video, visit:

<https://www.facebook.com/BBCRadioNottingham/videos/450885525475307/UzpfSTgwMTUxMTM5OTkzMTYzNjoyMzUzMDE4MzIxNDQ3NTk1/>

ANNOUNCEMENTS

Would you like an alternate site for your bees? Here are two opportunities: Ann Girarde of Mossyrook writes, “I am a property owner of vacant land (10 acres) in Mossyrook and I am wondering if there might be any bee keepers who are looking for a place to put a hive?” You can contact Ann at (253) 225-8648. Also, Leah Van Horn, (360) 244-9205, would like to host 2 or 3 hives on a half acre, pesticide-free garden in Chehalis. In both cases, the homeowners are not beekeepers and would ask the bee owner to manage them.

Got Honey – but no extractor to spin it in? LCBA has a 4-frame manual extractor which members can borrow to spin their honey at their convenience! The “extractor loan kit” comes with an uncapping stand, bucket, hot knife, and uncapping fork. Those who’d like to participate can contact LCBA mentor Phil Wilson, who has graciously agreed to coordinate pickup/dropoff of the extractor for members. You can reach Phil by email at wilsopj@gmail.com or by phone at 360 785 3804. For details on our “Loaner Extractor SOP” – guidelines for use, please visit our website: http://lewiscountybeekeepers.org/education/lcbas_loaner_extractor_kit.

Honey Wanted in Bulk: Antony Richfield from Silver Cat Farms, who spoke to our club about mead-making in January 2018, is seeking honey in bulk – 5 gallons and up - and would like to be contacted by beekeepers willing to sell. He is not concerned with filtration or crystallization. If you have honey in the quantities Antony's after, please email him at silvercatfarm@gmail.com or call 425 344 8058.

That’s all for now ~ take care, & bee happy!

~~ Susanne Weil, LCBA Secretary (Secretary@lcba.community; 360 880 8130)