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## September 2016 LCBA Newsletter

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- **Sept 10 Workshop: Fall Management – Winlock, 10 a.m. to noon**
- **Sept 10 “Getting Started in Beekeeping”: 2:15-3:30 pm, Centralia College**

#### **August 11 Monthly Meeting Summary: Dr. Dewey Caron’s, talk on Honey Bee Losses & What You Can Do To Help Your Bees (4–11)**

- **Business Meeting Notes (11-13)**

#### **Highlights from LCBA’s Exhibit at the Southwest Washington Fair (13 – 17)**

- **Official Fair Honey Contest Results (14-15)**
- **People’s Choice Honey Tasting Contest Results (16-17)**

#### **Bees in the News (18 - 20)**

- **WSU Study Suggests Neonicotinoid Pesticides Pose Low Risk to Honey Bees**
- **Neonicotinoid Insecticides Linked to Wild Bee Decline Across England**
- **Cannibalizing Honey Bees Target Deadly Mite**
- **FDA Issues Direct Final Rule Revising Categorization of Animal Drugs Used in Medicated Feeds – Beekeepers Won’t Have To Consult Veterinarians**
- **Nutrition Matters: Stress From Migratory Beekeeping May Be Eased by Access to Food**
- **Land Use Changes Threaten 40% of U.S. Commercial Bees**

#### **Announcements: (21)**

- **Queens for Sale!**
- **Lots with Forage Available to House Bees**
- **Talk Bees in Hawaii at the WAS Conference, October 13-15**

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

## UPCOMING EVENTS:

### Thursday, September 8: LCBA Monthly Meeting

**When:** 6 – 8:45 p.m.: Social Time, 6 to 6:30 p.m.; 6:30-7:30, presentation; 7:30, break; 7:45-8:45 business meeting & Beekeeping Q&A

**Where:** 103 Washington Hall, Centralia College, 701 W. Walnut St., Centralia WA 98531

**Topics:** Fall Management Strategies: Ways to Help Prepare Your Bees for Successful Over-Wintering. **Speaker:** President Kevin Reichert.

**Also:** Business Meeting with discussion of 2017 Dues Increase & "Beekeeping Q&A."



*Above left, hard sugar candy sits atop frames; right, moisture control box. These & other methods for helping bees over-winter will be featured at our September 8 meeting. Have you tried moisture control boxes or other methods? Please bring your stories of your experiences!*

### Saturday, September 10: Fall Management Workshop

**When:** 10 a.m. to noon

**Where:** An Apiary in Winlock (email [secretary@lcba.community](mailto:secretary@lcba.community) for directions)

**Topics:** Learn how to assess colonies' condition for overwintering & address issues like combining weak hives, consolidating bees into fewer boxes, moisture control methods, Varroa concerns, digital hive management methods, Q&A & more . . . in photo above, the hive boxes are painted with a propolis-based resin to help promote colony health. For directions, please RSVP to [secretary@lcba.community](mailto:secretary@lcba.community) - this workshop will be at a different apiary from earlier workshops this year. Please be sure to bring your protective gear. Children welcome :)



*Above, Sept 10 host Rick Battin paints his hive boxes with a propolis resin to help promote bee health.*

**Saturday, September 10:**

**How To Get Started in Beekeeping: Free Orientation**

**When:** 2:15 to 3:30 p.m.

**Where:** Washington Hall 103, Centralia College, 701 W. Walnut Street, Centralia, WA - follows "Gardening For Everyone"

**What:** Interested in keeping bees, but not sure what's involved? At this free overview, Lewis County Beekeepers' Association Instructors will cover benefits of beekeeping, "Bee Biology 101," equipment you'll need, how to set up an apiary, a year in the life of a beekeeper, getting & managing bees, harvesting honey, & more. Previews our beginning beekeeping course, which starts in January. Children Welcome. Questions? Email: [secretary@lcba.community](mailto:secretary@lcba.community) or call Susanne at 360 880 8130.



*Above, LCBA Beginning Beekeeping graduate Reena Schiele assesses a brood frame at our May workshop in Adna.*

**Saturday, September 17: Fall Management Techniques With Dr. Dewey Caron**

*Sponsored by the Pierce County Beekeepers Association*

**When:** 9:00 AM - 5:00 PM

**Where:** Allmendinger Center, WSU Puyallup Campus, 2606 West Pioneer, Puyallup, WA.

**What:** Lecture, Q & A, hands-on at the apiary (weather permitting), and afternoon breakout sessions. Lunch and break snacks are included.

**Cost:** \$30 for PCBA members; \$70 for non PCBA members. Limited to 60 participants. To register, visit: <http://pcbeekeepers.org/fall-management-techniques-with-dr-dewey-caron>

**Questions?** Please contact: Marge Pearson, [programs@pcbeekeepers.org](mailto:programs@pcbeekeepers.org)

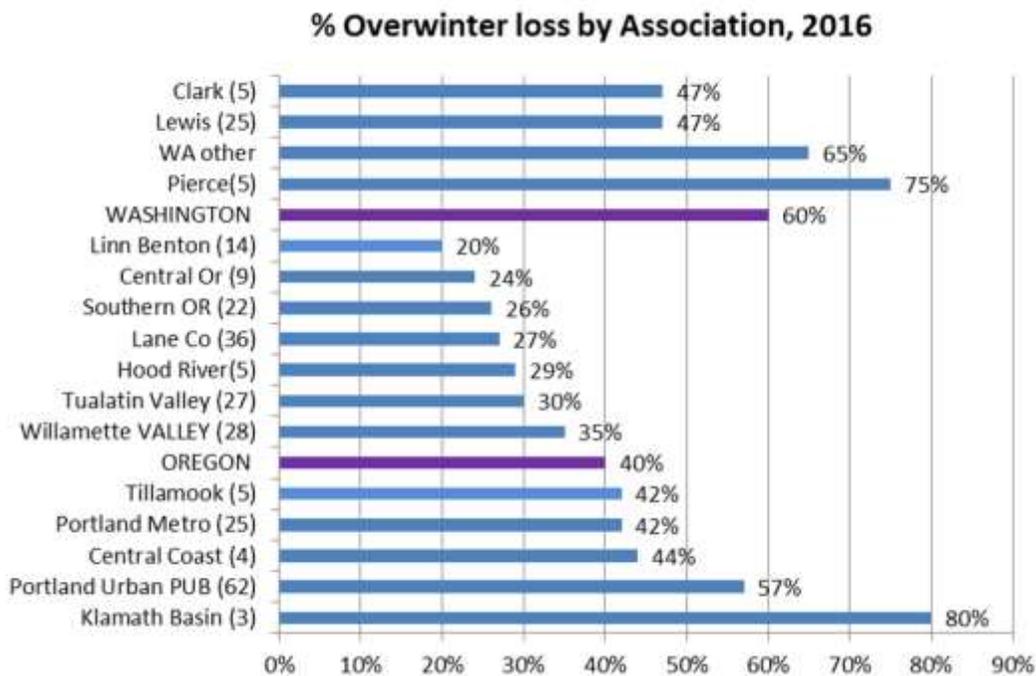
## August 11 LCBA Monthly Meeting Notes

### Lewis County & Honey Bee Health: Dr. Dewey Caron

Dr. Dewey Caron, Emeritus Professor of Entomology & Wildlife Ecology, University of Delaware, & Affiliate Professor, Dept. of Horticulture, Oregon State University (allegedly “retired”), again visited LCBA to share with us the results of two studies of honey bee losses and beekeepers’ procedures in the Pacific Northwest. Dewey explained that the Pacific Northwest Honey Bee Survey asks what beekeepers have done with their colonies through the year, and then looks at overwintering losses in that context. April is survey month – please participate! The more beekeepers respond, the more thorough the results will be. The survey is online at [pnwhoneybeesurvey.com/survey](http://pnwhoneybeesurvey.com/survey): reminders will be sent early next spring. The other major survey, by the Bee Informed Partnership, now has an 8-year-deep database.

Dewey’s complete report on Lewis County bee losses as compared with our state and region is available on LCBA’s website: [http://lewiscountybeekeepers.org/monthly\\_meetings](http://lewiscountybeekeepers.org/monthly_meetings) (scroll down to the August 11 meeting). What follows are some highlights and key take-aways from his talk.

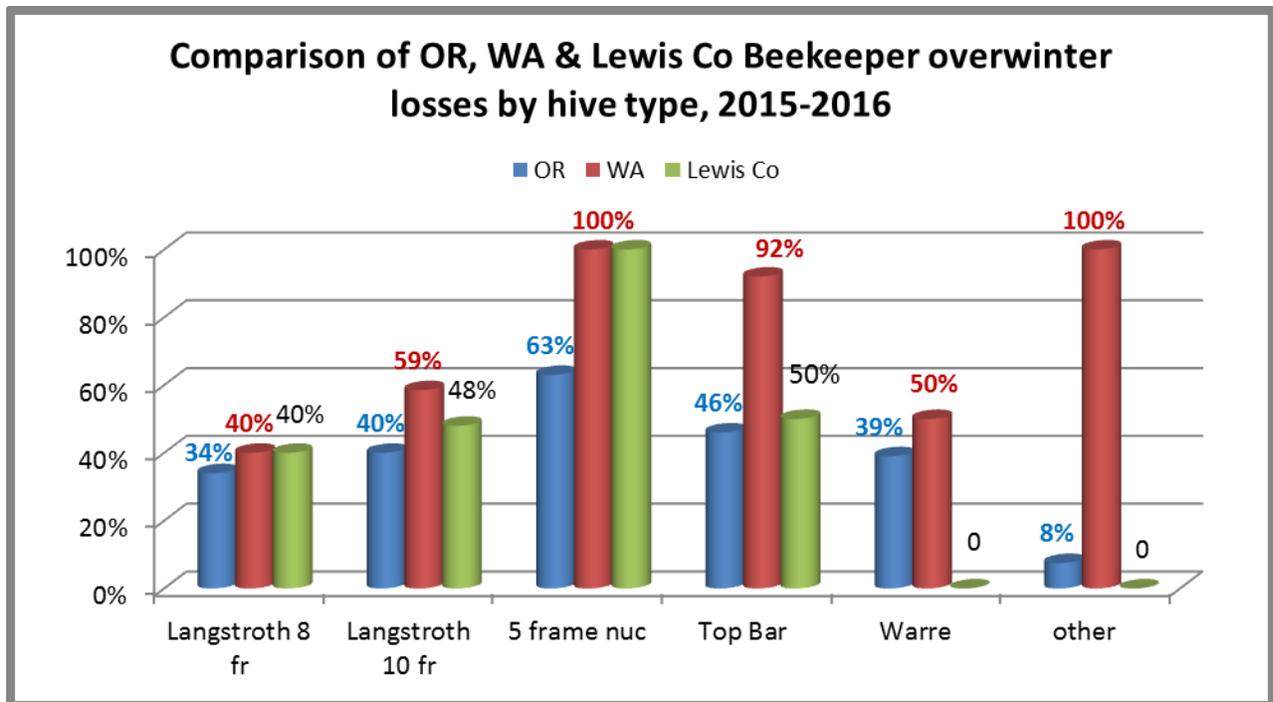
First, Lewis County had higher participation in this year’s survey than any other Washington bee association on the I-5 corridor, with 25 respondents. Overall, in 2015-16, those respondents had a colony loss rate of 47%, compared with the Washington State loss rate of 60% and Oregon’s of 40%. Dewey noted that central and southern Oregon in particular reported relatively low losses. Although our reported county loss rate was higher than in 2014-15 (18%), last year there were only 7 Lewis County respondents. In 2013-14, we had 61% losses: the “stop and start” weather that year caused problems.



Larger commercial beekeepers in the Pacific Northwest lost 16.7%; in Washington State, commercial beekeepers lost 28%, contrasted with 60% losses for backyard beekeepers statewide and 47% in our county. The 45 commercial beekeepers in this survey, Dewey noted, have an

estimated 61% of honey bee colonies in the PNW region and 59% of bee colonies in WA State. 50 to 500 colonies is classed as semi-commercial; over 500, commercial.

The survey compared loss rates for different ways of housing our bees:



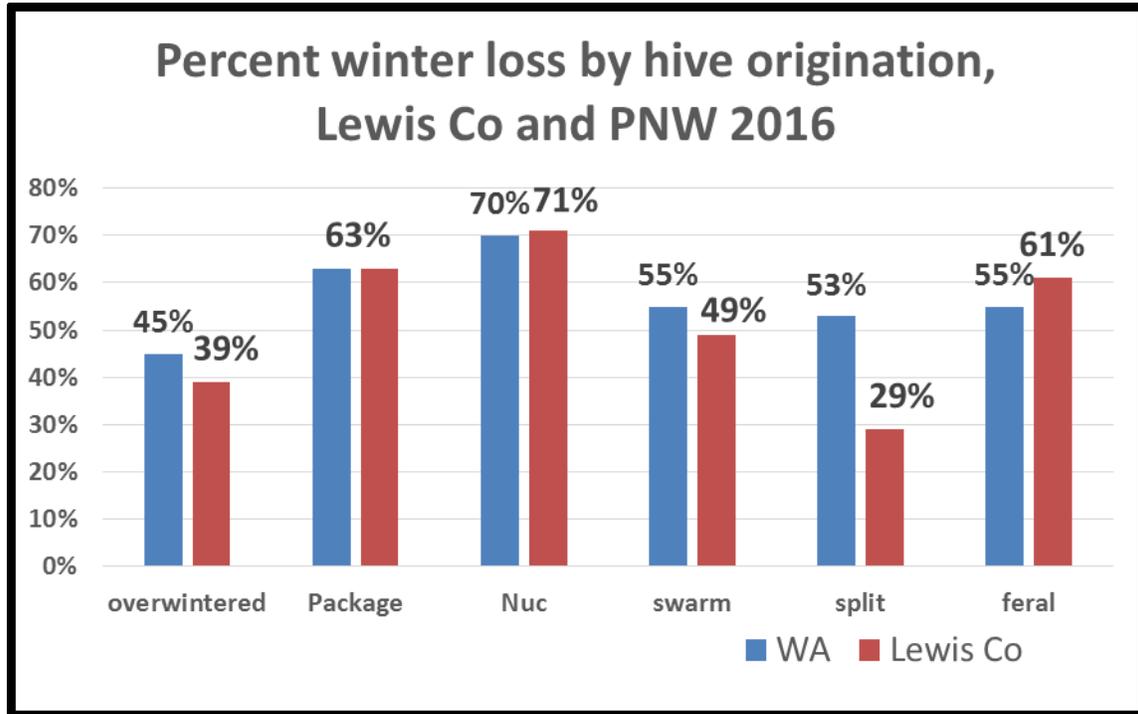
The loss rates for 8-frame Langstroth hives appeared to be less than for 10-frames. The nuc losses look dire in the graph, but to put that in perspective, only 1 Lewis County respondent reported keeping bees in a nuc. Top bar beekeepers in our county lost significantly fewer colonies than top bar beekeepers reporting statewide.

The survey also looks at “hive years” of beekeeper experience, which is calculated as the number of years of a beekeeper’s experience multiplied by number of colonies maintained. Most Lewis County respondents were new beekeepers, with 10 or fewer “hive years”: “60% of the 25 Lewis Co. respondents had 1 to 3 years of experience; 20% had 8 or more years of experience, with 54 being the longest. Of a total of 135 colonies, 48% of those returning a survey kept 1, 2 or 3 colonies; 2 and 4 colonies were the most numerous, with 7 respondents each reporting that colony number. The highest number was 30; 5 individuals maintained 8 or more colonies.”

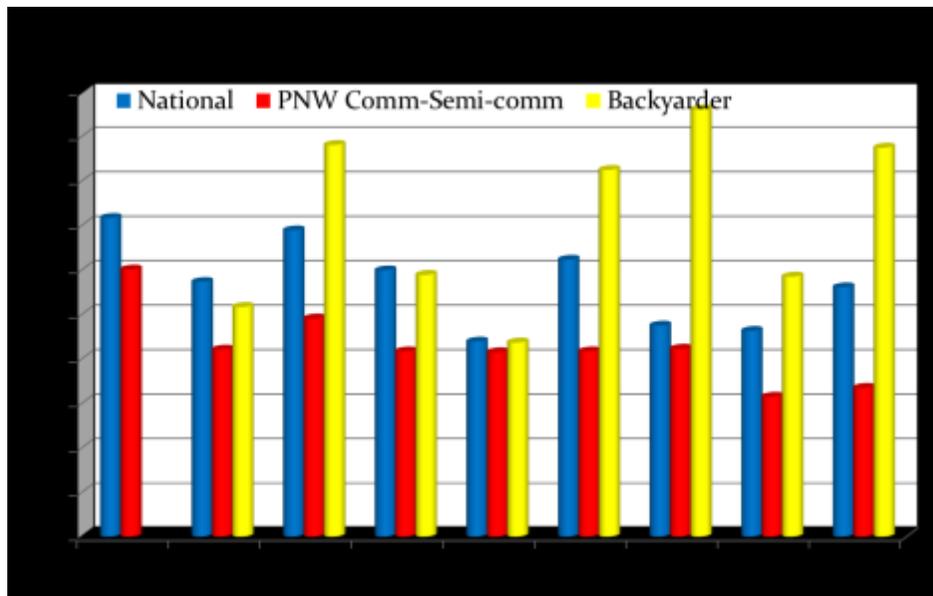
Dewey’s written report covers what these Lewis County respondents reported had given them the “greatest value of beekeeping educational experiences”: 24% reported bee club meetings, 18% reported our beekeepers’ association class, 15% reported beekeeping books & magazines, 13% reported bee mentor, 13% reported the WASBA Master Beekeeping program (see the report for a few other items). 68% of respondents said that they had been mentored.

The survey also asks about colony origin: were they overwintered, started from packages, nucs, captured swarms, or splits (see graph below)? “Overwintered colonies, as expected, had the best survival. Packages, swarms and feral hive transfers were less than 50% successful.” Splits in Lewis County did very well: 2 of 3 reported in this survey survived winter. However, the

reported package bee colony loss rate was higher for 15-16 than for the previous year (only 20%). Bob Harris asked if the data break out what colonies overwintered outside the state. Dewey answered that though the survey didn't ask about that, probably many commercial beekeepers do take their bees to other states. Nancy Toenyan asked if the breakdown was more commercial east of the mountains; Dewey said that it was.



Dewey next showed bee losses over the past nine years, noting that nationwide, from 2010 on, backyarders' losses were heavy in comparison to national numbers, particularly from 2013 on:



Dan Maughan asked if Dewey sees weather patterns, such as La Nina or El Nino, affecting losses. Dewey said that's a great question, though it is hard to handle and analyze data from weather.

Why do our bees die? The survey looks at what beekeepers perceive as reasons. Queen losses were the biggest perceived reason, 22%, followed by poor wintering and weak in fall, both 16%. 11% said mites; 11% said starvation; 11% said "other." Dewey noted that pesticides can be a significant factor: pesticides don't show up as much in the overwintering data, but they can cause colony deaths in active bee season or weaken a colony substantially through a pesticide kill. There is no one answer. Mites are certainly a major factor, but not the only one: we must consider poor nutrition, both from habitat loss and monocrop agriculture, diseases like Nosema, brood diseases, management; some might want to include contrails, global warming, even ETs!

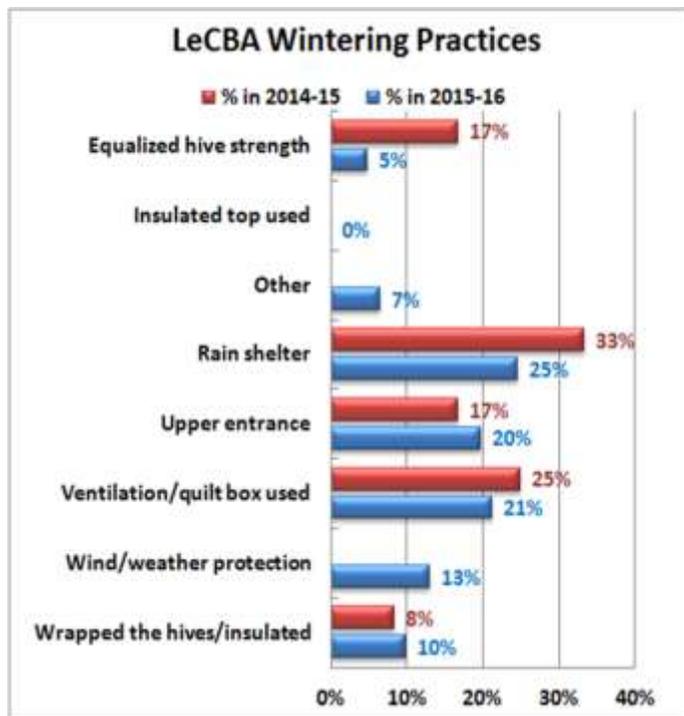
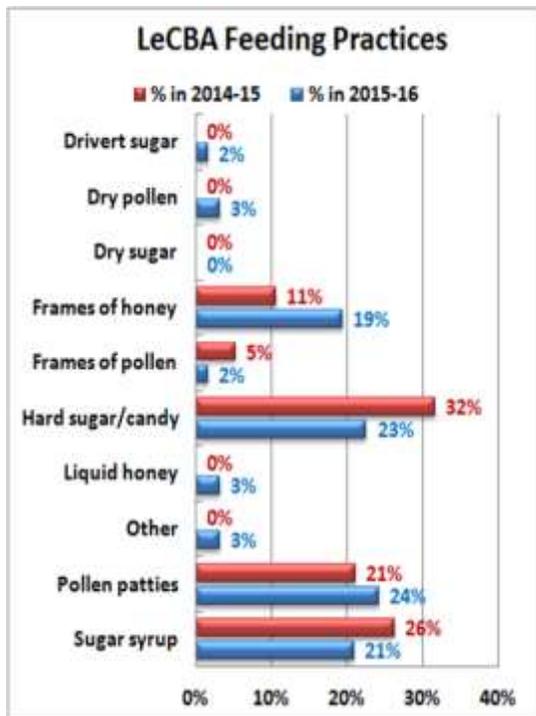
Walt Wilson asked about the impact of packages on our mite infestations. Dewey noted that anything we bring into an apiary – packages, swarms, carveouts, drifting, etc. – can bring mites. In packages, you may get mites; they may be younger mites that seem to take right off. Also, Dewey noted that indirect evidence suggests that if nothing is done about the mites, packages suffer. Nucs definitely suffer from mites, as they have brood.

Tim Weible asked: is getting queens from California part of the loss picture? Dewey answered that anytime you start a new colony, there is a risk. There's only a one in five chance of a swarm from a bee tree surviving its first winter in the wild. Many factors, including both beekeeper experience and the source of bees, are issues. Here in the Pacific Northwest, we can't raise local early season queens, so that means we are more or less forced to get them from elsewhere: that means that someone else from somewhere else with no knowledge of your region is making the selection of most important bee in your colony for you. On the other hand with swarm captures and combining colonies, can we really know the queens' real origins?

***How Do Beekeepers' Practices Affect Losses?*** To try to make sense of all these loss data, Dewey asks questions about beekeepers' management. For example, feeding practices: what percentage of loss is reported by each respondent who noted a particular feeding practice? Of course, Dewey noted, this is artificial because if you fed pollen patties, you probably fed other things, too – in the future, the survey will include a multivariate analysis.

However, we can look at one big question: did beekeepers feed their bees, or not? All Lewis County respondents answered that they used at least one feeding method, and many used more than one (see graph below). Perhaps surprisingly, "[l]ooking at losses, none of the feeding options, for either Lewis Co beekeepers or the larger database, improved winter survival rate. [However,] that does not mean feeding is not of value, as feeding management may be done for many more reasons than just to improve winter survival."

***Wintering Practices:*** All but one Lewis County respondent reported doing at least one thing to help prepare their colonies for winter (see graph below). Many used moisture control and ventilation methods: moisture, not cold, kills bees, Dewey emphasized. Although the responses showed no major difference between methods in preventing reported losses, there is a slight advantage to beekeepers who did something rather than nothing.



**Sanitation practices:** Dewey noted that we beekeepers tend to be sloppy about certain sanitation approaches (for example, how often do we clean hive tools when moving from inspecting one colony to another?) Minimal hive intervention is one major approach to sanitation: 42% of LCBA respondents reported this, and Dewey pointed out that while we can seriously harm bees if we look at them in winter, those reporting that they used minimal intervention had the same level of losses as beekeepers overall. Some interventions done before winter can be very effective – for example, brood cycle interruption, drone brood removal, re-queening with hygienic bees, using small cell/natural comb – however, relatively few beekeepers do these things.

84% reported using screened bottom boards; very few reported blocking off those bottom boards in winter, and those who did the latter reported no greater bee survivorship than those who did not. In general, screened bottom boards give about a 5% gain in survival, for many possible reasons – garbage and mites drop through, ventilation, etc.

**Dealing with Mites:** Many of us see mites as public enemy #1. Dewey urged that we visit the Honey Bee Health Coalition, which offers its report, “Tools For Varroa Management,” free online: [www.honeybeehealthcoalition.org/varroa](http://www.honeybeehealthcoalition.org/varroa). How do we mite-monitor? No one in the Lewis County data set reported doing the alcohol wash. Dewey explained how to do this – it has also been covered at LCBA workshops this year – and passed around a sample jar. What you hope to see with either the sugar shake or alcohol wash is a mite level below 2 to 5 % - that is, below 5 mites to 100 bees. If there are 5 mites per 300 bees, that is a low percentage. 5% is on the margin. This is a risk assessment: if you have 5% mite infestation, you risk their getting out of control – not to mention that mites transmit viral diseases. Commercial beekeepers tend to say that 2% is their top acceptable mite number: 2% would, for most commercial beekeepers, trigger a decision to do something.

Most respondents monitor mite drop. Some use the powdered sugar approach; others report using sticky boards, visual inspection of adults, or inspecting drone brood. With the sugar shake method, Dewey noted that it is good to let the jar sit in the sun and bake because the mites can't tolerate the heat and disengage from the bees, which are more heat tolerant than mites. Also the bees survive the sugar shake, unlike the alcohol wash, which kills them. Dewey cautioned that visual inspection is not reliable, though if you can see a mite on an adult bee, then you have a lot of mites in your colony.



*Above left, the sugar shake method for mite monitoring; right, the alcohol wash method.*

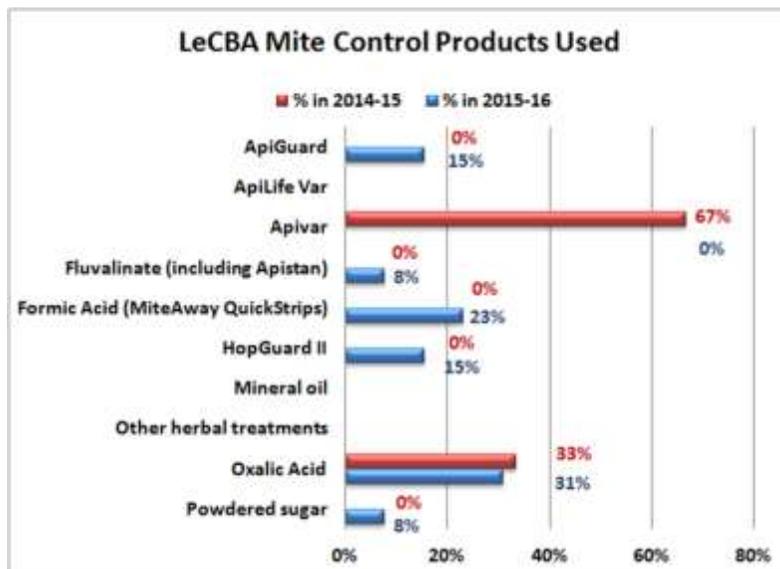
**Monitoring v. not monitoring, treating v. not treating?** Lewis County respondents who reported doing any monitoring method also had a slight increase in survival compared with those who reported no monitoring. 10 of 25 beekeepers in Lewis County reported that they did not monitor. 48% reported using mite controls; 52% did not. Those who used any mite control methods at all reported 46% losses, as opposed to 52% losses for those who reported that they did nothing. But it is pretty close. Those who did treat with a known Varroa control product reported 7 fewer overwintering colony deaths than those who did not. For the state overall, those who treated reported 58% colony loss; those who reported not treating had 72% loss. For Lewis County, those who treated reported 50% loss; those who did not reported 57% loss.

Much depends on what chemical you use if you choose to treat: some methods have greater effect. Powdered sugar does not have an effect. Those who used Apiguard reported 26% losses: Dewey noted that this one product doubled survivorship. Of course, many treated with multiple methods. Nationwide, Apiguard users reported 26 to 31% fewer losses; those using Apilife Var reported 24.5 to 40% fewer overwinter losses.

**What about acids for Varroa control?** Formic, beta hop, oxalic are the most frequently used acids. Formic acid is a good choice for those wishing to treat when brood is present. Use it for one week, and it will kill mites where they are reproducing. Oxalic acid, now legal, is becoming popular: it does not penetrate brood, but rather, works on phoretic mites. Dewey recommends not using them in summer, when there is a lot of brood- wait till less brood, but rather, in winter or early spring. You can apply oxalic acid in a dribble method with a plastic syringe, mixing the acid with syrup, and dribble the solution between the frames (hence the name).

Dewey also discussed the vaporizer method with the “tiny tiny tiny spoon,” that we have covered in previous LCBA meetings: the battery operation heats the crystals and the acid goes right to gas. To make this work, he noted, you must close both upper and lower entrances and leave the acid in for 7 to 10 minutes. You can cool the vaporizer in a bucket of water. However, Dewey cautioned that the oxalic acid, breathed in, kills human lung tissue: you must wear goggles and acid resistant gloves – and wear that respirator under your bee suit. Further, you must use a respirator of the proper type for this kind of acid, not any old respirator. Dewey commented that none of us like these approaches and gear, but they help.

**Conflicts in oxalic acid instructions:** Phil Wilson asked about instructions that say to use the oxalic acid vaporization 3 times at 7 day intervals. Dewey answered that that approach gets the recently hatched mites: however, you can harm your adult bees because the more times you use the acids, the more bees you kill. Dewey commented that he believes three times/seven day intervals is not the correct approach, and that he has gone head to head with manufacturers about it. He advocates using oxalic acid one time, in winter, on a warmish winter day, so the bees are not balled in a tight cluster. The oxalic acid vapor is more effective, ditto the drip, when bees are less tightly clustered.



**Loss numbers for acids used in varroa control:** For formic acid: 16 to 31% fewer overwintering losses (4 consecutive years of data starting 2010-11 through 13-14). For oxalic, 37 to 41% fewer losses (2 consecutive survey years, 2012-13, 13-14; Dewey suggested that the problems with use directions may affect these figures). For Hopguard II (beta hop acid permeating cardboard strips hung over frames in the brood chamber), 10% fewer overwintering losses with use in just one survey year, 2013-14. MAQs users reported 26% loss in bigger database. Dewey also noted that caging the queen and interrupting the brood cycle can help enhance oxalic acid or HopGuard use because if this is done right, all the mites will be on the adult bees. Finally, Apivar (amitraz): though no one in the Lewis County response numbers had used Apivar as a miticide, in Washington State, beekeepers who reported using Apivar reported a 25% loss level (as contrasted with the overall 60% losses reported by all Washington beekeepers who responded). Dewey cautioned that if you abuse Apivar, however, you may end up with your colony as a Superfund site!

***Have a Plan!*** Dewey was asked what he recommends – he says he doesn't recommend. Instead, he encourages people to have a plan. In the big pool of beekeepers, he sees three types of approaches:

- Commercial beekeepers use 2 or 3 different chemicals in one bee season: say, oxalic in winter, Apiguard in early summer, and then, after the honey supers come off, they use Apivar or MAQS.
- A second model: beekeepers who mix chemical with non-chemical approaches, as some sideliners and backyarders do – for example, using drone brood removal and screened bottom boards and monitoring, then going with an organic treatment such as Apiguard or MAQS, and then, at the end of the year, using an oxalic acid dribble. Some also split colonies at the end of season: the colonies don't need to be large at the end of the season because forage is basically over. Most, though, reduce/combine colonies in fall.
- The third way Dewey called “the James Bond Method – Live And Let Die.” How much does a colony cost? If you lost 3 of 6 colonies, can you afford to replace them? You may be better able to replace half your colonies if you are a small scale beekeeper than if you keep bees on a large scale. Smaller scale beekeepers may spend the money for a few years, but then stop beekeeping. Bob noted that we may need to emphasize that beekeeping takes work.

***Not treating for mites can cause problems for other beekeepers:*** Dewey also noted that yet another problem with mites is that as the colony dies, the mites jump ship to other bees if they can. This means that those who don't treat can spread the problem: “Bee Havers” can cause problems for beekeepers. However, we know that no one treatment is The Answer – so far, we have only partial answers. The long term answer will be resistant bees, but we do not have them yet. Dewey pointed out that in the survey data, 2 of 3 locally reared Lewis County queens survived, suggesting the value of locally adapted queens.

***We're not in it for the honey:*** Dewey left us with this final thought: Lewis County respondents reported having harvested 1744 pounds of honey (19 individuals): about 100 pounds each. We are not in beekeeping for honey production. Dewey noted that adulterated honey coming in from abroad is tanking the honey prices and wrecking it for the beekeepers.

Dewey closed his presentation by asking us to participate in even higher numbers in next year's survey: “help us find out what works here.” Kevin thanked Dewey for helping us see how our experiences with our bees compare with those of others in our region.

## **August 11<sup>th</sup> Business Meeting**

***How are our bees doing?*** Kevin asked how members were faring with honey. Many said that this year production is low: even large colonies have just one super. Gottfried Fritz commented that “the early spring pulled the legs out from under us.” Gordon Bellevue noted that he had a super nearly full in late May – but the bees cleaned it out after he'd put on his second super.

***Treasurer's Report:*** Treasurer Rick Battin reported that the current balance in LCBA's main account is \$5461.94. Major transactions include \$227.22 for nametags, two new memberships and one renewal and a \$250 donation for a removal done by Kevin, Martin, Cody, Rick, and some other members of the removal team. The current balance in the scholarship account is

\$1969.17; major recent transactions include a deposit for \$636 from the summer potluck raffle proceeds. Rick noted that he has purchased a ticket tumbler and 10,000 identical tickets for future drawings: he is donating these to the scholarship fund/program. The tumbler has a handle – members can spin it themselves – and is fully screened, so ticket mixing is clearly visible. Kevin thanked Rick for this donation, which will streamline our drawings.

***Southwest Washington Fair Progress Report:*** The Queenline Jars for the official Fair honey contest and the half pint jars for the People’s Choice tasting were available again for members to pick up. Community Outreach Coordinator Dan Maughan and Secretary Susanne are coordinating volunteers, whose tickets and parking passes were available for pickup at tonight’s meeting as well. Dan and Susanne encouraged everyone to enter honey in the contests. We expect to have a big exhibit with many educational displays. Kevin and Dan repaired the observation hive: Kevin cautioned that though the hive is now stable, it should not be picked up by the top handle – the side handles are the safe and stable way.

***Club Apiary Update:*** Kevin presented an update on plans for our Club Apiary. Kevin noted that now that we have insurance, as well as an upgraded hold harmless agreement blessed by an attorney, it is the right time to move ahead on our apiary.

- Phase One has been selecting an area. Kevin thanked those who had suggested possible locations; the board unanimously voted to locate the apiary at Vice President Bob Harris’s Rose of Sharon Farm on North Fork Road in Chehalis, which is relatively centrally located in the county. Bob is loaning the land to our club free of charge, for which the board is very thankful. It is an exciting development for LCBA.
- Phase Two will be selecting the specific site. Bob and Dan are going to walk the property and select a one-eighth of an acre area. Bob will do the site prep, laying down cloth, buying bark, etc.
- Phase Three will be selecting philosophies of beekeeping to foreground at the site, selecting bees, etc. Mentorship Coordinator Martin Stenzig is donating some hive boxes, as is Kevin – donations are welcome and will help keep costs manageable. Ideally, we would ultimately have 8 to a dozen colonies on site, though that will be a while down the road. Our goal is to move our workshops to the apiary site and hopefully manage them even better, with cover for the hives. Mentors could meet mentees at the site and work together at the apiary. If there is interest, then eventually we could try to do queen rearing at the site.

Education Coordinator Peter Glover noted that we will likely need a shed, where we could also store larger items like the club extractors. Phil Wilson asked whether we are just using the space or actually leasing it. Kevin answered that it would be a loan with legal documentation to clarify the relationship between Bob as property owner and the club. Phil commented that as a nonprofit, LCBA might be able to get a grant. Kevin asked Phil to give any grant information or possibilities to Rick, Dan, Martin, and Bob, the Apiary Committee. Kevin asked if anyone in the club had grant writing experience; Nancy Toenyan said that she could give it a try.

***Education Program Update:*** Peter reported that our Journeymen are completing the final stages of the WASBA program. So far, Dan Maughan, Terrie Phillips, William Pittman, and Pamela Daudet have finished – Peter congratulated them for navigating all the tricky WASBA tests, completing their journal and service points requirements, and home apiary inspections. Rick

Battin and Linda Newton each have just a few last items to complete. Several others will likely complete in 2017. WASBA will be issuing certificates again in September, so we hope to present some graduation certificates at our October monthly meeting.

**Youth Scholarship Program Update:** Susanne reported that both Josiah, Gottfried's mentee, and her own mentee, Sam, are doing well with their bees. They will not get honey this year, like many first year beekeepers amid our strange weather pattern, but they are enjoying their bees and looking forward to helping staff our exhibit at the Fair on Children's Day. Nancy Toenyan asked how many youth scholars we are planning to fund in 2017. Peter answered that we have enough funds for three and may raise more at the holiday potluck, but it will depend on whether we get serious applicants willing to take the class, attend workshops, etc. We are planning to use social media, the Fair, and our "Getting Started in Beekeeping" orientation at Gardening for Everyone to get the word out.

**Upcoming Events:** Susanne announced that we will have our Fall Management workshop on Saturday, September 10, 10 a.m. to noon: those who would like to attend, please email for directions. We will cover assessing condition of hives going into fall/winter, methods for moisture and mite control, and more. Rick Battin will demonstrate digital hive tools and infrared camera apps to help manage colonies. We warmly encourage our new and nearly-new beekeepers to join in.

We are also having a free orientation to what's involved in starting with bees on Saturday, September 10, 2:15 to 3:30 p.m. at the end of Gardening for Everyone. Susanne asked members to let friends and relatives who are interested in beekeeping to come.

## LCBA AT THE 2016 SOUTHWEST WASHINGTON FAIR



*Above left, a fun new feature at this year's Fair was Tim Weible's "bee the bee face" photo board. Middle & right, Gordon Bellevue & Mary Ellen Wilson answer questions about the observation hive.*

The Fair is done - many thanks to our volunteers who staffed our LCBA exhibit & loaned display items! Our exhibit was busy the whole week long, and we received many compliments on our educational displays. Discover Lewis County and Edna Fund shared our Facebook posts, getting the word out about our Observation Hive and People's Choice Tasting days. Now, some special appreciations are in order!

Number One: a huge thank you is due to Community Outreach Coordinator Dan Maughan & President Kevin Reichert. Dan loaned his bees for our Observation Hive & brought different queens & bees back & forth to the Fairgrounds & took care of them through the hot conditions so our visitors could enjoy & learn from them. That was a LOT of work! Kevin, along with Dan,

came in & coordinated the exhibit on a daily basis. Special thanks to Kevin for bringing that fan: people would've melted in the Floral Building without it on the hottest days of Fair Week!

Next, thanks to our terrific volunteers, who answered questions from curious visitors & shared their love & knowledge of bees: Sue Allen, Chuck Ament, Bill Barr & Tracy Chilelli, Rick Battin, Gordon Bellevue, Ron Black, Ed Carter, Pamela Daudet, Gottfried Fritz, Judy & Gary Kalich, Mel Grigorich, Peggy Hammer, Steve Howard, Richelle Jackson, Don Marshall, Dan Maughan, Tom Mayberry, Matt Mecham, Harold Mullins, Kevin & Jeanne Reichert, Nancy Toenyan, Cody & Linnea Warren, Chris Weedon, Susanne Weil, Mary Ellen & Phil Wilson, Walt Wilson, & our Youth Scholars, Sam & Josiah. Our volunteers' expertise & enthusiasm help make our exhibit an exciting draw for Fair visitors!

Thanks to our members who loaned display items & made it possible for visitors to see beekeepers' tools & learn about bees:

- In addition to bees for the Observation Hive, Dan Maughan loaned his hand-made cedar Langstroth hive box display, as well as his "photo hive box" with educational picture placards, a great teaching tool.
- Gottfried Fritz brought in samples of wax & his antique "No Trespassing – Bees" tin signpost.
- Sharette Giese loaned her "gifts of the hive" demonstration of wax, pollen, honey, royal jelly, & more, plus her bee anatomy board game for kids.
- Peter Glover loaned an example bee suit & set of hive tools, plus a nuc & sample bee package.
- Steve Howard loaned one of his hand-tooled cedar hinged-lid top bar hives.
- Kevin & Jeanne Reichert & Grant Inmon loaned their amazing wild hive display.
- Kimo Thielges loaned – donated, actually – his "humble bumble" bee house, leaf cutter bee house, & mason bee house, plus his informational handouts about mason bees & booklet of other pollinators.
- Tim Weible loaned a hand-crank extractor, a sample paper wasp nest (without wasps – thanks for that, too!), the "Home of the 12th Bee" Seahawks championship commemoration hive, and the "bee the face of the bee" picture board, where many parents took photos of their children through the week.
- Susanne Weil brought in the photo boards of club activities, bee health issues, "is it a honey bee – or something else," and "plant forage for bees."
- The National Honey board donated all those great recipe cards & brochures about the making of honey.
- Thanks to ALL our members who donated half pints of their honey for the People's Choice tasting contest! More than 250 visitors completed the tasting & more sampled just a few honeys. More about that bee-low. . . .

Finally, thank you to Education Coordinator Peter Glover, who came in on a kneeler-scooter to judge the official Fair honey contest in the wake of foot surgery! Results of the honey contest are listed below.

## *Official Fair Honey Contest Winners*



*Above left, 19 jars of honey and assorted wax products after judging; right, “Best in Show” honey honors were shared by Steve Howard and Dan Maughan.*

Even though this has not been a halcyon honey year, 19 nicely presented jars of honey were entered in the official Fair Honey contest by 11 LCBA members; Education Coordinator Peter Glover evaluated them in accordance with the criteria presented at our June monthly meeting (see our July newsletter).

Best in Show honors were shared by Steve Howard and Dan Maughan, each of whom scored 99% of possible points for their amber honey.

Blue ribbon honors were won by Pamela Daudet, Steve Howard, and Chris Weedon.

Red ribbons were won by Barb & Kevin Cearley, Kevin Reichert, Lisa Sills, and Phil Wilson

White ribbons were won by Steve Howard, Harold Mullins, Dan Maughan, and Mary Ellen Wilson.



*Above left, youth scholars Josiah and Sam observed Peter’s evaluation of the honey; middle, Pam Daudet with her blue ribbon honey; right, Richelle Jackson’s first ever beeswax candle won blue!*

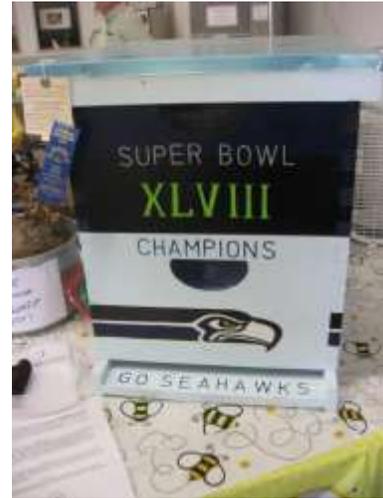
For wax products, Dan Maughan and Tim Weible won red ribbons.

For candles in the “other bee products” category, Richelle Jackson won a blue ribbon, and Dan Maughan won a red.

For his chunk honey entry, Gottfried Fritz won a red ribbon.

For the “other” category, Steve Howard won best in class for his hand-tooled cedar hinged top bar hive. Blue ribbons went to Kevin Reichert for the wild hive display, and to Tim Weible for his paper wasp display, as well as for his “Home of the 12<sup>th</sup> Bee” Seahawks-themed Langstroth hive.

Thanks to all for entering bee products for the public to enjoy viewing! Here are some highlights:



*Above left, Steve Howard's top bar hive; middle, Kevin & Jeanne Reichert's and Grant Inmon's wild hive had been invaded by wax moths over the prior winter, so this year, it was a floor display, letting visitors see wild comb up close; right, Tim Weible's Seahawks-themed Langstroth hive boxes.*

### ***People's Choice Honey Tasting Contest***



The People's Choice Tasting Contest once again drew a steady stream of visitors to the Floral Building to taste 14 local honeys, Kimo Thielge's donated Oahu tropical honey, & one other . . . a "special blend" donated as a thought-provoking educational prank by Dan Maughan & sons: High Fructose Corn Syrup, with 15% water, ½ tsp each of artificial rum & vanilla extracts, 6 drops of yellow #5, 3 drops red #40, & 1 drop green artificial coloring. Discerning visitors pegged it for what it was – others, particularly children, actually liked it because it tasted like caramel! Many adults who liked it hurriedly changed their vote when they found out its secret identity. The "Special Blend" gave us a special chance to educate the public about adulterated commercial "honey" – thanks, Dan!

This year, Peter Glover & Susanne Weil's blackberry/wildflower honey from their Onalaska girls took First Prize in the People's Choice Tasting with 50 votes. No one is more surprised than Susanne, who voted for Kevin's marionberry honey, which won for the past 3 years straight!

Pamela Daudet took 2nd place with her dark, spicy honey from her south Olympia farm.

Third place went to Cody Warren for his wildflower honey from Rochester with 26 votes (his black locust blossom honey was a big hit, too, with 12).

Fourth place went to Kevin Reichert for his marionberry honey – once again a big favorite with those who like its almost port-wine-like notes – 18 votes, followed closely by his & Grant Inmon’s Toledo clover honey (16 votes/6th place).

Fifth place went to Dan Maughan’s “Special Blend” of corn syrup – showing that we still have some public education work to do ☹

Tied for 7th place – Chris Weedon, for his blackberry/wildflower honey from Olympia, & Dan Maughan, for his carrot blossom honey – the latter was again a conversation provoker among the more serious honey fans to visit our exhibit.

Gottfried Fritz submitted honey with some cilantro notes for Sunday only – it garnered 13 votes & would likely have placed high had it been available both days!

All the honeys entered received love from visitors – none went vote-less. Thanks to Harold Mullins, Steve Howard, Lisa Sills, Kevin & Barb Cearley, & Kimo Thielges for donating honey!



*Above left, Dan Maughan answering questions at the People’s Choice tasting; right, Gottfried Fritz, ever the science teacher, entered his Chehalis cilantro-note honey in a beaker! Below, visitors enjoying watching the bees in our Observation Hive:*



## BEES IN THE NEWS

*Thanks to Fran Bach, Pamela Daudet, Gillian Davis, Steve Norton, Kaylene Tate, Phil Wilson, and the good folks at Bee Culture & American Bee Journal.*

**“Study: Neonicotinoid Pesticides Pose Low Risk to Honey Bees”:** Courtesy of Washington State University News, By Maegan Murray, WSU Tri-Cities (posted by American Bee Journal, 22 Aug 2016

WSU’s new study, in which several Lewis County Beekeepers participated, “shows that [neonicotinoids] pose little risk to bees in real-world settings.” Researchers studied bee bread from 149 Washington state apiaries managed by 92 beekeepers in “urban, rural and agricultural areas in Washington state, looking at potential honey bee colony exposure to neonicotinoid insecticides from pollen foraging this spring. After calculating the risk based on a ‘dietary no observable adverse effect concentration’ – the highest experimental point before there is an adverse effect on a species – of five parts per billion, the study’s results suggest low potential for neonicotinoids to harm bee behavior or colony health.

The results turn on the question of “risk vs. hazard”: “Calculating risk, which is the likelihood that bad things will happen to a species based on a specific hazard or dose, is very different from calculating hazard, which is the potential to cause harm under a specific set of circumstances,” said co-author Allan Felsot, WSU Tri-Cities professor of entomology and environmental toxicology. “Most of what has dominated the literature recently regarding neonicotinoids and honey bees has been hazard identification,” he said. “But hazardous exposures are not likely to occur in a real-life setting.”

Tim Lawrence, lead researcher (Tim spoke at LCBA’s October 2014 monthly meeting) pointed out that “many sublethal toxicity studies, whether at the organism level or colony level, have not done formal dose-response analyses.”

During the year of trial, the researchers found “neonicotinoid residues” in under 5% of both urban and rural apiaries. “About 50% of apiaries in agricultural landscapes” showed residues of the neonicotinoids clothianidin and thiamethoxam, but “the amounts were substantially smaller than levels shown in other studies to not have effects on honey bee colonies. The WSU researchers referenced 13 studies to identify no observable adverse effect concentrations for bee populations, which they used to perform a risk assessment based on detected residues.” Lawrence cautioned that it is important for those applying these pesticides to follow package directions to avoid exposing pollinators to dangerous dosages.

To read more, visit: <http://us1.campaign-archive1.com/?u=5fd2b1aa990e63193af2a573d&id=da3ab75fb2&e=e9ff21e0bb> . To read the complete study, visit <http://jee.oxfordjournals.org/content/early/2016/01/19/jee.tov397> .

**“New study: Neonicotinoid Insecticides Linked to Wild Bee Decline Across England”:** American Bee Journal, 17 Aug 2016

A new study has connected the drop in population of wild bees species in England to “exposure to neonicotinoid seed treated oilseed rape crops.” The study “examined changes in the occurrence of 62 wild bee species with oilseed rape cropping patterns across England between

1994 and 2011 - the time period spanning the introduction of wide-scale commercial use of neonicotinoids.”

Bees that habitually feed on oilseed rape crops, like the Buff-tailed bumblebee, showed rates of population decline three times greater than those that forage more widely. “These findings add to previous small-scale and short-term exposure studies which have identified negative effects of neonicotinoids on honeybees and a limited number of commercially-bred wild bee species. For five of the species investigated, including the spined mason bee (*Osmia spinulosa*) and the furrow bee (*Lasioglossum fulvicorne*), neonicotinoid use was equivalent to at least 20% of local population extinctions of wild bees.”

The researchers say that “the data suggest that neonicotinoid use is correlated with wild bee biodiversity losses at a national scale and has implications for the conservation of bee communities in intensively farmed landscapes. The results add to an extensive body of evidence that will inform the review of the risks neonicotinoid pesticides pose to bees being undertaken by the European Food Standards Authority and anticipated to be complete by January 2017.” The researchers also noted that neonicotinoids are far from the sole culprit in wild bee losses: “habitat loss and fragmentation, pathogens, climate change and other insecticides” also play a role.

To read more, visit: <http://us1.campaign-archive2.com/?u=5fd2b1aa990e63193af2a573d&id=2a073df582&e=e9ff21e0bb> . For Yahoo News coverage with some very good links, visit: <http://finance.yahoo.com/news/18-study-bees-finally-sheds-184100396.html> .

#### **“Cannibalizing Honey Bees Target Deadly Mite”: Items for Beekeepers, 17 Aug 2016**

Bees that have the Varroa Sensitive Hygiene (VSH) gene can find capped brood harboring families of Varroa mites, which the VSH bees then “cannibalize.” Researchers noted that “The bee nest can tolerate losing individual bees because they’re producing thousands per day from the queen, but the mite family can’t tolerate the interruption. The bees eat the mite offspring as they cannibalize an infested pupa. The female mite will attempt to reproduce only three to five times in her life. If every time she tries to reproduce the VSH bees interrupt the cycle, the mite population declines.”

The national USDA bee lab at Baton Rouge is working to get the VSH stock out to beekeepers by selling breeder queens: they are working to “avoid inbreeding.” To read more, visit: <http://deltafarmpress.com/soybeans/cannibalizing-honey-bees-target-deadly-mite-kills-colonies?page=3>

#### **“FDA Issues Direct Final Rule Revising Categorization of Animal Drugs Used in Medicated Feeds”: Bee Culture, 23 Aug 2016**

Beekeepers may have read with alarm that as part of plans to reduce antimicrobial resistance, the USDA planned to require that any drugs given to animals – with bees classified as “animals” – could only be distributed by prescription. This would have required beekeepers wishing to treat for example – Nosema with Fumagillen to consult veterinarians, many of whom know relatively little of bee biology. As the new rule was reviewed, the USDA heard these concerns, and has “announced . . . a direct final rule to ensure that drugs used in animal feed remain available for

therapeutic purposes in food-producing minor species after changes are made to remove the production claims from these drugs.” Bees are classified as “minor species” in the new rule (“major species” include “poultry, swine, cattle”; “minor species” include “sheep, goats, catfish, game birds, and honey bees, among others”). The FDA is still taking comments on the new rule.

To read more, visit: [http://www.bee-culture.com/catch-buzz-fda-issues-direct-final-rule-revising-categorization-animal-drugs-used-medicated-feeds/?utm\\_source=Catch+The+Buzz&utm\\_campaign=1aa480ebe7-Catch\\_The\\_Buzz\\_4\\_29\\_2015&utm\\_medium=email&utm\\_term=0\\_0272f190ab-1aa480ebe7-256261065](http://www.bee-culture.com/catch-buzz-fda-issues-direct-final-rule-revising-categorization-animal-drugs-used-medicated-feeds/?utm_source=Catch+The+Buzz&utm_campaign=1aa480ebe7-Catch_The_Buzz_4_29_2015&utm_medium=email&utm_term=0_0272f190ab-1aa480ebe7-256261065)

**“Nutrition Matters: Stress From Migratory Beekeeping May Be Eased by Access to Food”:**  
*American Bee Journal*, 24 Aug 2016

Many have suspected that migratory beekeeping stresses bees: a large-scale new study by North Carolina State University has shown “that travel can adversely affect bee health and lifespan,” though commercial beekeepers may be able to lessen this effect by choosing good forage and by supplemental feeding.

One test in the study compared bees that had been trucked to pollinate California almonds, then moved to Maine, with bees that stayed put at the NCSU apiary and found that “traveling colony bees lived about one day less than the stationary bees. ‘One day may seem trivial, but when a normal forager bee lifespan is only around 20 days, one day is significant,’” said lead researcher Simone-Finstrom. The second test “compared lifespan and colony health of migratory bees that traveled relatively short distances in North Carolina . . . to stationary bees,” with the same shortened lifespan. But the greater stress on the traveling bees was lessened later in the season when they were moved into new forage; meanwhile, stay at home bees were experiencing stress as their forage disappeared. The final test showed that bees born in migratory, as opposed to stationary, colonies had higher stress levels.

To read more, visit: <http://us1.campaign-archive2.com/?u=5fd2b1aa990e63193af2a573d&id=a2b21ba7c8&e=e9ff21e0bb>

**“Land Use Changes threaten 40% of U.S. Commercial bees”:** *Bee Culture*, 4 Sept 2016

The Northern Great Plains of North and South Dakota – home to over 40% of U.S. commercial bee colonies – are losing forage that beekeepers seek for locating colonies, as “crops actively avoided by beekeepers, such as corn and soybeans, are becoming more common in areas with higher apiary density,” according to the U.S. Geological Survey. Biofuel crop production – now covering 3 million acres - is one of the factors driving this change. The corn and soybean crops also rely on pesticides dangerous to bees.

In the past, “the Northern Great Plains have served as an unofficial refuge for commercial beekeepers because of their abundance of uncultivated pasture and rangelands, and cultivated agricultural crops such as alfalfa, sunflower and canola that provided forage for bees.”

To read more, visit: [http://www.bee-culture.com/catch-buzz-land-use-changes-threaten-40-u-s-commercial-bees/?utm\\_source=Catch+The+Buzz&utm\\_campaign=584554a96c-Catch\\_The\\_Buzz\\_4\\_29\\_2015&utm\\_medium=email&utm\\_term=0\\_0272f190ab-584554a96c-256261065](http://www.bee-culture.com/catch-buzz-land-use-changes-threaten-40-u-s-commercial-bees/?utm_source=Catch+The+Buzz&utm_campaign=584554a96c-Catch_The_Buzz_4_29_2015&utm_medium=email&utm_term=0_0272f190ab-584554a96c-256261065)

## ANNOUNCEMENTS

***Need Queens?*** Dave Gaston is selling locally (Littlerock)-reared queens for \$30 apiece – you can contact him at [fauxelk@hotmail.com](mailto:fauxelk@hotmail.com). You can also order queens from Beeline Apiaries or Ruhl Bees – for their contact info, see our LCBA webpage: [http://lewiscountybeekeepers.org/beekeeping\\_supplies](http://lewiscountybeekeepers.org/beekeeping_supplies).

***Looking for land with good forage to house some of your bees next year? 2 local opportunities have come up:***

(1) Cormac Mahoney, manager of Jeremy's Farm to Table Restaurant in Chehalis, invites a beekeeper to house bees on his property outside Centralia. If interested, you can contact Cormac at: 360-748-4417

(2) Michelle Werts owns 20 acres in Toledo that she doesn't plan to develop for at least 5 years. She lives in Oregon and would like to invite a beekeeper to house hives on her Toledo property in exchange for some honey. If interested, contact her at [fortmats@msn.com](mailto:fortmats@msn.com).

***Talk Bees In Hawaii! The Western Apicultural Society's 2016 conference will be held at the Ala Moana Hotel on Waikiki Beach, Honolulu October 13 – 15.*** WAS's theme - New Insights into Old Questions - focuses on "health problems that affect honey bees and the pollinator community as a whole." Speakers, workshops, special events are planned.

If you're going or interested in going, please email [secretary@lcba.community](mailto:secretary@lcba.community) so that we can put LCBA attendees in touch with each other. Room rates are \$159 (+ tax) per night in the Kona Tower; \$179 (+ tax) per night in the Waikiki Tower (single/double). Room cut-off date is September 12th, 2016. Reservations can be made online or call the following numbers and reference the Western Apicultural Society group: (800) 367-6025Â FREE (U.S. & Canada), (800) 446-8990Â FREE (Neighbor Islands), or direct (808) 955-4811 Group Reservations. For more information, visit: <http://www.westernapiculturalsociety.org/category/conference-news/>

**Western Apicultural Society Newsletters:** [http://groups.ucanr.org/WAS/WAS\\_Journal](http://groups.ucanr.org/WAS/WAS_Journal). Click on the line in the paragraph on the right as directed. If you're still getting the old issue, click on "empty cache" in your browser or "refresh" or "reload" under VIEW in your menu bar.

**WSBA Newsletter:** Pick up your copy online at [www.wasba.org](http://www.wasba.org): click on "Newsletters."

***That's all for now ~ take care, & bee happy! ~~ Susanne Weil, LCBA Secretary***  
***([Secretary@lcba.community](mailto:Secretary@lcba.community); 360 880 8130)***