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## July 2019 LCBA Newsletter

### *In This Edition:*

Upcoming Events (2 – 5), including:

- *July 13 – LCBA’s 11<sup>th</sup> Annual Summer Potluck ~ Lintott Alexander Park, Chehalis*
  - *Also Fundraising Drawing for 2020 Youth in Beekeeping Scholarships*
- *July 27 – Workshop: Erin O’Rourke from WSU Diagnostic Lab will sample LCBA Apiary hives for Varroa, Nosema, & more. Start time 10 a.m. Also, tips on Removing Honey Supers*
- *August 8 – Monthly Meeting – Dewey Caron will present 2018-19 bee loss data with reflections on causes*
- *August 10 – Dewey Caron will lead a workshop at our club apiary – club members only, free of charge, please RSVP to [secretary@lcba.community](mailto:secretary@lcba.community). Time, 9 a.m. to noon with Q&A & refreshments to follow*
- *August 12 – setup for LCBA’s Southwest Washington Fair exhibit, 11:30 am to 1pm, Floral Building*
- *August 12 – 1 to 7 pm, drop off honey entries for Southwest Washington Fair honey contests, Floral Building, Fairgrounds; jars available @July 13 potluck*
- *August 13 – 18 – LCBA will have our exhibit at the Floral Building – contact [secretary@lcba.community](mailto:secretary@lcba.community) if you’d like to volunteer.*

Notes from LCBA’s June 13 Monthly Meeting (6 – 15)

- **Peter Glover – Quick notes on entering honey in our Fair contests (6 - 7)**
- **Terrie Phillips – Planting for Bees (8 - 13)**
- **Business Meeting Notes, including Youth Scholarship Update: (13 - 15)**

**Bees in the News (15 - 21) covers bee loss data, sad news about pesticides, hopeful news on Nosema, compelling research on benefits of pollen, & more....**

**Announcements, including used bee gear for sale & folks seeking honey for sale (21 - 22)**

*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



*Above left, Shelter #2 at Lintott Alexander Park; right, LCBA members at a past potluck enjoying food & fun items won at the drawing to support our Youth Scholarship Program.*

### **Saturday, July 13: LCBA's 11<sup>th</sup> Annual Summer Potluck**

**Come enjoy good food, good fellowship, & talk bees. Families welcome!**

**When & Where: 3-7 p.m., Lintott Alexander Park, Shelter #2; 1101 Riverside Dr, Chehalis, (Off Hwy 6)**

**Facilities:** We'll have 10 large picnic tables & benches (altogether, facility can accommodate 100), wood-burning stove, electrical outlets, outdoor faucet, garbage cans/liners. Shelter #2 is adjacent to a large field, so you're welcome to bring dogs, Frisbees, ball games!

**Please bring:** A dish to share, plate, cutlery – and family! All ages are welcome. LCBA will provide water, pop, napkins, & a couple main courses. FYI, park management requests no alcohol at this event.

**Drawing for 2020 Youth Scholarship Program:** Bee gear, gift certificates, & fun items will be available for those who buy \$1 drawing tickets. If you'd like to help us involve more young people whose families are new to beekeeping, please consider bringing an item to donate! Gently used items are welcome & do not have to be bee themed ☺



*Above, scenes from past Summer Potlucks. We hope to see you this year!*

**Saturday, July 27**  
**LCBA Workshop:**  
**Testing for Varroa, Nosema, & More / Removing Honey Supers**

**Erin O'Rourke from WSU Diagnostic Lab will sample LCBA Apiary hives for Varroa, Nosema, & more – come learn testing techniques & ask questions!**



*Above left, Erin O'Rourke, manager of the WSU APIS Diagnostic Lab; right, LCBA Treasurer & Journeyman beekeeper Rick Battin demonstrates the sugar-shake method for Varroa testing.*

**When:** 10 a.m. to noon with Q&A to follow; we may have an afternoon session depending on interest and weather.

**Where:** Please RSVP to [secretary@lcba.community](mailto:secretary@lcba.community) for location & directions. Even if you know where the club apiary is, please RSVP so that we know how many to expect – thank you!

**What: *Testing Bee Colonies for Parasites & Diseases:*** LCBA is taking part in WSU's diagnostic sampling effort this year, and Erin O'Rourke of the WSU APIS lab is coming to sample all of LCBA's apiary hives. She will demonstrate different methods of Varroa testing, Nosema sampling, and more. Bring your questions! Also, if you would like to participate in WSU's research sampling initiative, please contact the secretary (see above) for info on how to get your sampling kit.

***Removing Honey Supers:*** Also, for those who are getting ready to remove supers for the first time – or who have done it before, but would like to see alternative methods – we'll demonstrate the fume board, bee escape board, the “gradual removal,” & “brush & run” methods. Tips on honey storage, too. General bee Q&A & refreshments to follow.

## *Two Events with Dr. Dewey Caron This August!*



### **Thursday, August 8: LCBA Monthly Meeting**

#### **Dr. Dewey Caron: Learning from the Past - Loss Survey Results**

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

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

**What:** We know that 2018-19 was a brutal year for honey bee losses. Dr. Caron will offer an analysis, rather than just numbers, to help us learn from what we've lost and, let's hope, avoid seeing similar losses next year. Bring your stories & questions! Also, brief business meeting with updates on LCBA's Fair exhibit.

### **Saturday, Aug 10: Workshop with Dr. Dewey Caron**

#### **“Reading the Hive” – for both new & experienced beekeepers**

**When:** 9 a.m. to noon

**Where:** Please RSVP [secretary@lcba.community](mailto:secretary@lcba.community) for directions and registration.

**What:** Dr. Dewey Caron will lead a workshop in "reading the hive," assessing colony condition, brood pattern, disease indications, & more. This workshop is designed for both new and experienced beekeepers. It is free but open only to LCBA members. Please RSVP (see above) so that we can keep track of numbers. Q&A to follow with refreshments!



**Tuesday, August 13 – Sunday, August 18:  
LCBA Will Bee Back At the Southwest Washington Fair!**



*Above, left, former youth scholars Sam & Rylea demonstrating Cody's "bee the face of the bee board"; right, visitors intrigued by the observation hive at the Fair.*

LCBA will have our exhibit in the Floral Building again – observation hive, honey contests, display items, our "bee the face of the bee" photo board for kids of all ages, & our great volunteers! Many members signed up to volunteer at our June 13 meeting – we'll have the sign-up sheets available at our July 13 Potluck too. LCBA members who volunteer receive free admissions & parking tickets. See below under Monthly Meeting for criteria & process to submit your honey in the official Fair contest or the People's Choice Tasting Contest – or both!

**Want to enter YOUR honey in the Official Fair Contest?**

You must drop it off at the Floral Building on Monday, August 12 between 11 a.m. and 6 p.m. OR contact secretary@lcba.community to drop it off. Honey must be entered in Queenline jars. For guidelines on the honey contest, click [here](#). For tips on how to prepare your honey to enter the Fair contest, see the link on the next page of this newsletter.

**Want to enter YOUR honey in the People's Choice Tasting Contest? See the next page, beginning of the June Monthly Meeting writeup for details.**



*Ever notice that Lewis County is shaped like a honey frame? ☺*

## THURSDAY, JUNE 13 ~ LCBA Monthly Meeting Notes

### Opening Announcements

LCBA President Kevin Reichert kicked off the meetings with some quick announcements before we moved to our speaker, Terrie Phillips, and her forage presentation.

**Honey Wanted in Bulk:** Kevin re-introduced Antony Richfield from Silver Cat Farms, who spoke to our club about mead-making in January 2018. Antony 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](mailto:silvercatfarm@gmail.com) or call 425 344 8058.

**Upcoming Events:** Secretary Susanne Weil gave a quick overview of our upcoming events, including our July 13 Summer Potluck and participation in the Fair, as well as noted planning for upcoming workshops (see Upcoming Events, pages 2-5 of this newsletter).

**Bee Order Followups:** Kevin apologized for any unpleasantness at our JC bees pickup, and he noted Juan Carlos's gracious gift of the splits to the club. Kevin noted that Juan Carlos took full responsibility for the nucs being more like splits, and he graciously made a gift of them all to the club. Rick is handling the refunds. Kevin pointed out that this year has been a perfect storm of weather problems and bee losses, and other commercial beekeepers struggled with the schedule too. Further, there have been unusual queen issues with bees this year: he has caught some queenless swarms!

**Club Extractors for Sale:** The club has two nine frame radial extractors in basically mint condition, heavy gage with no dents. These were bought in 2014 to support honey extracting workshops, but we have decided to upgrade to an automatically cranking extractor that will be bought later this year. Meanwhile, Bob Harris has volunteered his extractor to support members who would like to spin their honey. *(Post-meeting update: the extractors are sold.)*

**Honey Judging at the Southwest Washington Fair:** Kevin introduced Peter Glover, LCBA's Education Coordinator, who judges honey at the Southwest Washington Fair. Peter gave a quick overview of our upcoming contests and how members can participate.



*Above left, honey display at the 2017 Southwest Washington Fair; right, honey judge Peter Glover assesses moisture content in a honey entry with Susanne clerking.*

## ***Two Honey Judging Contest: The Official Fair Contest & the People's Choice Honey Tasting:***

***The Official Fair Contest:*** Peter noted that honey for the official Fair contest is, ironically, not judged on taste because taste can be very subjective. Instead, honey is judged on moisture content (under 18.6.% moisture & it isn't honey!), cleanliness, and presentation. For specific information on the different categories for honey submissions, the score card with judging criteria, detailed directions on how to prepare your best possible honey sample, demonstration photos with "dos and don'ts," and more, please visit our website (the slideshow is linked under "Education"):

[http://lewiscountybeekeepers.org/education/preparing\\_your\\_honey\\_for\\_fair\\_judging](http://lewiscountybeekeepers.org/education/preparing_your_honey_for_fair_judging) (Also, you can check the July 2017 LCBA Newsletter, which you can find on our website under Newsletters: the write-up includes Q&A discussion about the honey judging presentation.)

***Where & When To Enter Your Honey for the Official Fair Contest:*** If you'd like to enter, please pick up a Queenline Jar at the Potluck or contact [secretary@lcba.community](mailto:secretary@lcba.community) to get yours – these are free to members. Honey entries are turned in at the Floral Building at the Fairgrounds from 1 pm to 7 pm on Monday, August 12. If this doesn't work for you, you can contact Susanne ([secretary@lcba.community](mailto:secretary@lcba.community)) and arrange to drop your honey off in advance. The judging takes place on Tuesday, August 13, and the winners will be on display in the Floral Building by noon.

***People's Choice Tasting Contest:*** LCBA's other honey contest at the Fair is the People's Choice Tasting. Members submit honey in half-pint jars – which will be available for members at the July 13 potluck – and visitors to the exhibit taste all the samplers, then cast a ballot for their favorite. This contest lets members of the public experience the wide range of different flavors of raw local honey – a great educational opportunity. LCBA started this contest in 2013, and Kevin Reichert won with his marionberry honey (rich and with almost wine-like tones) in 2013, 2014, and 2015; in 2016, Susanne and Peter's blackberry/wildflower honey won; in 2017, Kevin won again, and in 2018, Pamela Daudet won with her raspberry-tasting honey. Who will win in 2019? Maybe you will take home the bragging rights!

***Where & When To Enter Your Honey for the People's Choice Tasting Contest:*** Since the contest happens on Saturday, August 17 and Sunday, August 18, you can drop off your half pint taster at the Fair exhibit anytime from Monday, August 12, 1 pm, till Saturday morning at 10. Please bring it in a bag with a note with your name & contact information – please don't put any identifying marks on the jar itself.

*~ next page for our featured speaker ~*

**Featured Speaker: Terrie Phillips**  
**Journeyman Beekeeper & Master Gardener**  
**“Planting Forage to Support Your Bees”**

*(Terrie’s PowerPoint is on LCBA’s Website under “Monthly Meetings”)*



*Terrie suited up for a swarm capture, June 2019*

Kevin introduced Terrie, who has been keeping bees with her daughter Michaela in Toutle since 2013. Terrie took the WASBA Apprentice and Journeyman trainings through LCBA, and also completed her Master Gardener’s certification through Lewis County Extension. Terrie has great forage in her hilly area, and she lost only three of her eleven colonies last year!

Terrie commented that many people now realize the global economic value of insect pollination: about 5 billion dollars per year. Honey bees do 80% of that work, and now many understand that they are a keystone group in our ecosystem. Education has changed people’s awareness so that many now realize not only honey bees’ importance, but native pollinators’ too.

As we know, bee losses have been severe since 2006: Terrie showed a slide with the BeeInformed Partnership’s loss data for 2018-19 (see “Bees in the News,” below). The data show that we are losing twice as many colonies as we expect.

***So what can we beekeepers do? For one, avoid neonicotinoids in planting:*** Terrie said that to find out if the plants you buy come from seeds infused with neonicotinoid pesticides, which evidence shows harms bees, you must ask the vendor. Terrie suggests being extra careful at big box stores: 51% of plants bought at garden stores have the neonics. However, good garden shops



are aware of the issue and have neonic-free options. If you are concerned about neonics, you can talk to your representatives: Olympia banned neonics on public property, but that's just one city.

***Delay weeding and mowing:*** It's not necessary to mow constantly or pull every weed. Bees will forage on the blooms, and you can kill the weeds later – just mow before they go to seed.

***Avoid spraying plants when bees are flying:*** If you have to spray, evening is best since bees don't forage at night. It's very important to check labels of product for directions on when to spray, times of day, etc.. Also, try specific targets rather than just spraying everything. If your neighbors spray pesticides, you can ask them to give you a couple days' warning so that you can screen your hive openings and keep your bees inside.

***Dealing with weather:*** Climate change may be out of our personal control, but we are doing our part by being beekeepers and supporting local bee associations. We can help our bees by keeping aware of weather patterns and overall climate. Our plants are shifting their growing schedule, as we've seen with our recent long winters and delayed spring. Bees come out of their winter diapause, but either the early forage is already over or it is delayed. Observe the microclimate where you live. Terrie is in a microclimate in her hill above Toutle where things are different than down below. Be aware and think about this as you plan to plant for your bees. You may have to change what you plant to fit what the weather will support.

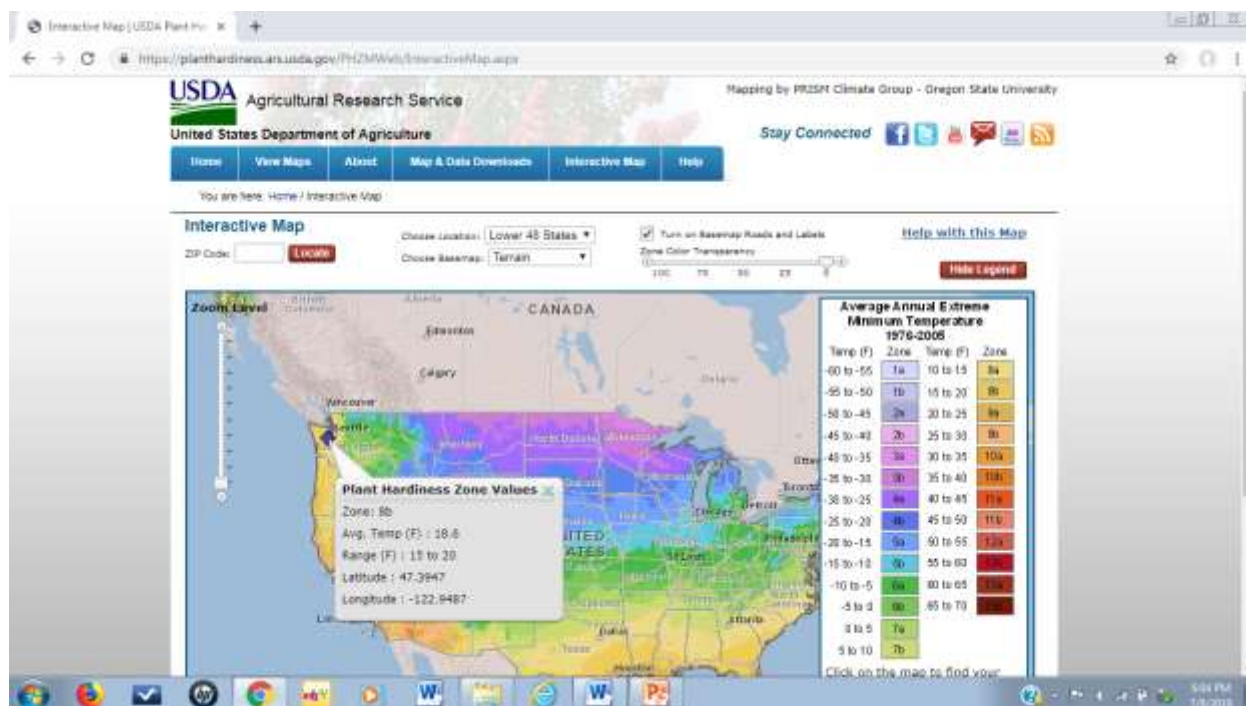
***Plant healthy forage for bees:*** Terrie believes that we need to plant heirloom or heritage vegetables or plants that are not genetically modified or infused with neonicotinoids. Often seeds from commercial hybrids don't grow well and come up all scraggly. Some plants are changed and won't produce nectar or pollen.



*Terrie's 2019 Lavender Starts*

***Loss of habitat is one thing we can really affect:*** As you look at your property, think of where you can create habitat. Small gardens are fine; you don't have to have a huge garden to have blooms that bees can visit. You can even use containers if you are in an apartment. If you have friends who want to support bees but don't want to be beekeepers, you can encourage them to plant for bees. Here are some ideas:

**Things to think about before selecting plants.** First, the time factor: how much time do you have to create and maintain that habitat? Plant in a way that will work with your available time and energy. Growing season: the USDA's Cold Hardiness Map shows growing zones (see <https://planthardiness.ars.usda.gov/PHZMWeb/InteractiveMap.aspx>). If you are higher up, it will be cooler with late frost date: Terrie can get frost as late as June 1<sup>st</sup>. She lost two months of grow time when she moved to Toutle. In PNW, we are usually in zones 5 to 8, the cooler zones. When you get plants, keep in mind what realistically can thrive where you plant. Some plants may need to be started indoors and then moved outside because we may not have a 120 day summer.



*Screenshot of USDA Cold Hardiness Interactive Map*

**Bee on time: plant plants that coincide with bee needs.** Plant things to bloom in late summer and into fall because bees still are foraging then. Be aware of habitat loss in your bees' forage radius and be sure you are supplementing with your own planting.

**Floral constancy:** Individual honey bee foragers prefer to forage from one flower at a time. This is called floral constancy and aids stable pollination within floral species. For example, Terrie doesn't see bees on her lavender till the blackberries are done. They go to their preferred nectar first and then on. Do you have existing plants that bees like? Plant more of them.

**Where to plant:** Terrie recommends that you look at space, light available, watch how the sun goes across your property, and make sure you don't put a shade plant where it will get major sun exposure, or vice versa. Also consider soil types: what do you have? Terrie has heavy clay and acidic soil, as do many in this county, so you may have to amend the soil with compost, and be sure to till it all in. Soil needs aeration so roots can breathe, so if you lighten up with sand or soil conditioner or compost, that helps aerate. Lewis County Master Gardeners can help with testing your soil so that you can see how much actual soil you have in a sample and what else is in it.

Also, soil content can vary at even relatively short distances on your property, so test and check. If that sounds like too much work, another option is to make raised beds.

***Plant your garden in the vicinity of your bees, so they spend less travel time and energy.*** Bees use scent to find nectar and pollen. Timing should be yielding nectar all day.

***Companion gardening:*** plant bee forage plants among your other plants. Marigolds can deter garden pests. Small green areas like median strips can be planted. Also you can “leave it wild” – if you have an area of your property that’s undeveloped, let the weeds go because they are good for bees. (In fact, weeds have medicinal value for bees: see LCBA’s August 2014 Newsletter for a writeup of a talk by Franclyn Heineke, WASBA Master Beekeeper, on this topic.)

***Borders for bees – make borders to lawns and fill borders with flowers.*** Drought-tolerant borders are especially useful in that you don’t have to water constantly.



***Go native: what is natural where you are?*** Honey bees will pollinate 50% of native plants – Terrie noted that native plants attract 50% of honey bees and 76% of bumblebees, but exotic plants only attract 7% of honey bees and 8% of bumblebees. For example, orchids are not native to the PNW. Scotch broom was an imported plant that now is everywhere; knotweed from Japan is choking waterways and competing with native plants; butterfly bushes are not native. You don’t need to use as much fertilizer when you plant native plants which are adapted to your soil. Also, natives will have less disease and need fewer pesticides. Local plants will be adapted to the local water supply. Non-invasives should be planted and supported because invasives are choking out local plants and thus destroying the best forage for our bees. Promote local, native



biodiversity. For more information about this, visit the Xerces Society website ([xerces.org](http://xerces.org); also, see LCBA's March 2018 Newsletter for a writeup of a talk by Bill Wamsley from the Lewis County Noxious Weed Board on the topic of invasives). If you must plant exotics, pick those with a simple flower that is easy for bees to get into, like a Rose of Sharon.

**Mix It Up: bees are not picky eaters.** Bees have long tongues. Other types of bees are pickier. Honey bees do like plant diversity – different types, different depths of where nectar is in a flower. If you have a diversity of plants, you will get a diversity of pollinators. Terrie recommends overlapping plantings so that there is always something in bloom for the bees. Rick Battin noted that he plants a quarter acre of late blooming food.

**Plant breeding: be aware that some new hybrids lack pollen and nectar.** Also, some plants, like buckwheat, stop producing nectar in the afternoon. Some plants, like red poppies, provide pollen but no nectar. Different plants mean different menus for the bees. Terrie recommends saving yourself time and money by going with perennials, so you need to do less replanting.

**Flower shapes:** Flowers come in a vast variety of shapes: open dish, brush, tube, flag, gullet, and bell & funnel. Flatter, smaller flowers tend to be better for bees. What's hard for bees to get into, Terrie observed, are tubular flowers, like foxglove.



"2013-07-24 19-25-34-abeille" by Thomas Bresson - Own work. [Licensed under CC BY 3.0 via Wikimedia Commons](#)

**Does color matter?** Bees have good color vision and tend to prefer blue, purple/violet, white, and yellow. They see things differently than we do: for example, a yellow plant shows as white and orange in her photo (see PowerPoint).

**Deadhead your plants once they have bloomed and are fading:** if you deadhead, the plant will grow back and rebloom and bees get more food.

**Drought tolerant plants:** Terrie's slideshow lists perennials like Asters, Bee Balm, Blanket Flower, Butterfly Weed, Catmint, Coneflower, Goldenrod, and more (for the full list, see the slideshow on our website, Monthly Meetings link). Ideally, get drought-tolerant native



perennials. It's a big advantage in drought time to have plants that need less water. For example, California poppies are drought tolerant, bees love them, and they reseed every year.

**Bees love multipurpose plants like herbs**, and so do we. Herbs have medicinal value: basil, borage, chives, cilantro, lavender, mints, oregano, rosemary, sage, and thyme. Herbs are very drought tolerant. Rosemary blooms early, around April, and bees love it. Other multipurpose plants like vegetable garden plants are feeding both bees and us.



Above, "[Honey bee on a rosemary flower,](http://commons.wikimedia.org/wiki/File:Honey_bee_on_a_rosemary_flower,_Sandy,_Bedfordshire_(7110166545).jpg)" by Sandy (Orangeaurochs), Bedfordshire United Kingdom Wikimedia Commons, licensed under [CC BY 2.0](https://creativecommons.org/licenses/by/2.0/)  
[http://commons.wikimedia.org/wiki/File:Honey\\_bee\\_on\\_a\\_rosemary\\_flower,\\_Sandy,\\_Bedfordshire\\_\(7110166545\).jpg](http://commons.wikimedia.org/wiki/File:Honey_bee_on_a_rosemary_flower,_Sandy,_Bedfordshire_(7110166545).jpg)

**Trees are low maintenance and do provide nectar when they bloom and pollen.** Asian pear, cherry are early bloomers that feed bees. Also they provide millions of blooms and even improve our air quality. If you're concerned about climate change, trees are taking CO2 out of the air. Linden trees and Franklin trees are good nectar plants. Bees like maple sap. Willow is liked by bees. Gottfried noted that Burnt Ridge Nursery in Onalaska sells linden and also fall blooming bee trees. Finally, bees like "understory plants" on forest or wood edges after timber harvest.

**Just add water:** Be sure you have drinking water for your bees, and be sure there are things they can stand on so they don't drown, like a chicken feeder with stones.

**Resources:** Terrie's slideshow concludes with a resource slide that gives URLs for many sources. Terrie recommends several books, such as *100 Plants To Feed the Bees*, by the Xerces Society. Pollinator Partnership has plant guides with bloom times. Buzz About Bees has information and ideas for planting. Also, the Indiana Department of Natural Resources has information on bloom times.

Kevin led the membership in thanking Terrie for her informative presentation!

## June LCBA Business Meeting

**Bee Buzz:** Members reported on swarm captures, some odd queenless swarms, queen issues and requeening. Many have thriving hives taking advantage of the forage. We've had relatively few swarm calls, but Gary Kalich got this "silver-spoon" beauty on the left, and, right, the nice bees that settled on the easy access fence now belong to Terrie:



**Treasurer's Report:** Treasurer Rick Battin noted that if you ordered bees from JC Bees and want a refund, please come get it; others will be mailed. Our current checking balance is \$19,782.23, though this number includes the JCBees orders that will be refunded. Our recent transactions included Beeline Apiaries cashing our check for \$1,175 for the remainder, 50%, of our Carniolan order. We have one check for \$566.56 to reimburse Peter for covering the tuition for our Apiary manager Cody Warren and 2017 Youth Scholarship student Adam Claridge to take WSU's queen rearing course. Once these checks clear, our checking balance will be \$7,560.67. Our Youth Scholarship fund balance is \$2,678.97, but the funds for this year's student, Damon, have not yet been debited. Finally, our savings balance is \$5,002.56.

**Education / Youth Scholarship Program Update:** Peter reported that Adam, one of our previous Youth Scholarship students who has maintained not only his interest, but participation in the club, and Cody were in Pullman for the WSU queen rearing class during this meeting. Sue Cobey, the queen bee of queen rearing, among other WSU faculty will be instructors, so the course should be excellent. Peter commented that we need to up our expertise in queen rearing so that we can up our game in our club apiary, and Adam and Cody will present about what they learned later this year at a monthly meeting.

**Community Outreach:** Preparations for July 13 Potluck & Southwest Washington Fair are well underway. For the potluck, we have a committee ready to go and just ask members to come, have

fun, and if so moved, bring an item for the Youth in Beekeeping Scholarship fundraising drawing. Bob Harris announced that we have also invited the Cowlitz County Beekeepers to join us at our July 13 potluck.

For the Fair, Community Outreach Coordinator Pamela Daudet and Susanne asked for volunteers to set up the exhibit, as well as passed around a sign-up sheet for volunteers for each day of the Fair. We need you folks to make our exhibit work: people love to ask questions about bees, and even if you are a beginner, bee-lieve us, you know more about bees than the typical visitor to our exhibit, so please come share your knowledge and excitement!

**Mentor Program:** This report was tabled, as Cody was away.

**Apiary Update:** Bob updated us on the Apiary. Road construction has started, so all will be gravel: if you come to visit the Apiary, be prepared for flaggers, etc. Bob, Cody, and Kevin went through all the equipment and cleaned, stacked everything for inventory. Also, the Apiary has been weed-whacked. Gottfried brought an 8 frame hive so that people can learn about that type of hive: he put a swarm in it with a nice laying queen. We now have nine colonies plus the top bar hive. We will have another workshop on July (the 27<sup>th</sup>) to cover how to sample bees and test for mites or disease, as well as cover honey super removal. Bob is also moving forward to build a shed that he will own but the club can use; he asked if anyone knows someone in the shed business, and one member did.

## BEES IN THE NEWS

*Thanks to Phil Wilson, Gillian Davis, Steve Norton, & the good folks at Bee Culture & American Bee Journal for news stories.*

### **“U.S. Beekeepers Lost Over 40% of Colonies During the Last Year, With Annual Survey Showing Winter Losses as the Highest Ever Recorded,” American Bee Journal, May 2019**

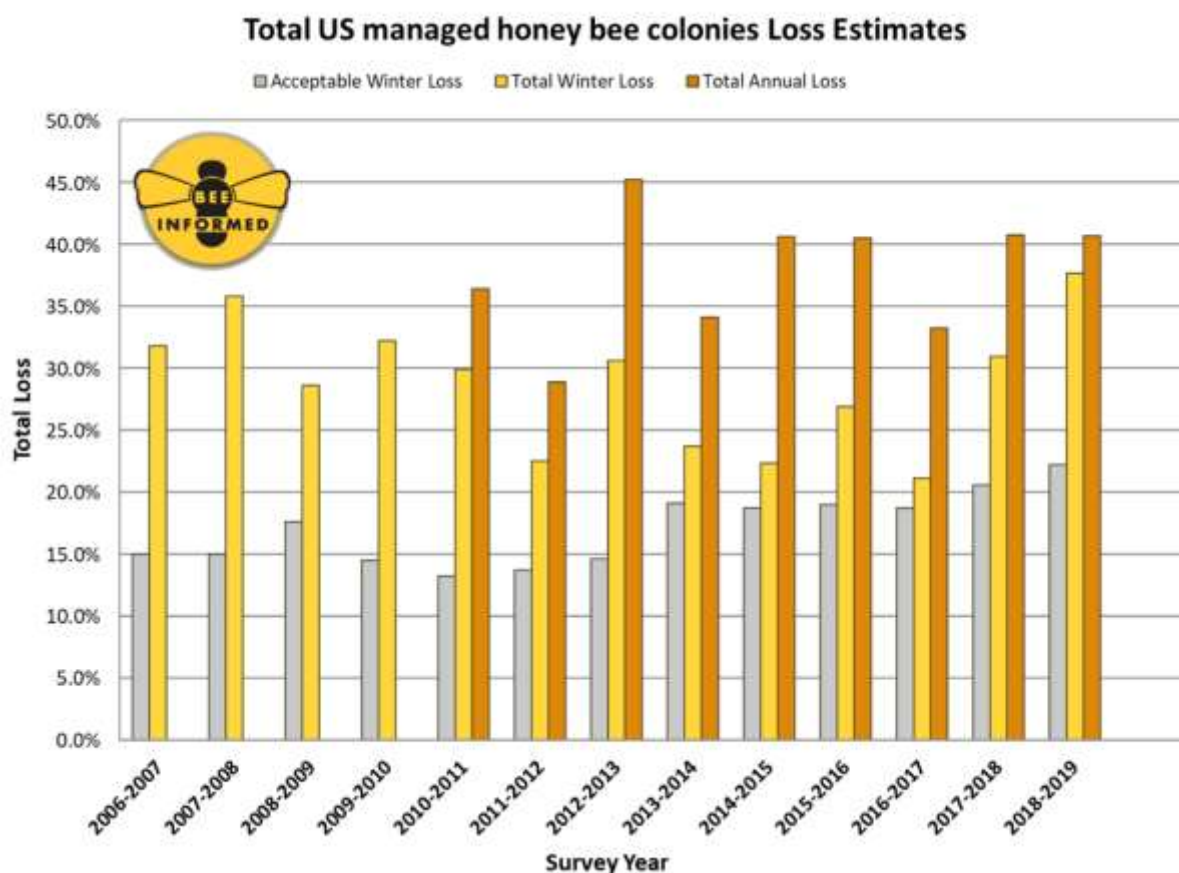
ABJ reports on the University of Maryland/BeeInformed Partnership study of honey bee losses. As we knew, 2018-19 was brutal. The article is reproduced in full here for those who may not have seen it, and Dr. Dewey Caron will be our August 8 speaker, helping us take away lessons we can put to work in our bee yards:

“Beekeepers across the United States lost 40.7% of their honey bee colonies from April 2018 to April 2019, according to preliminary results of the latest annual nationwide survey conducted by the University of Maryland-led nonprofit Bee Informed Partnership. The survey results indicate winter losses of 37.7%, which is the highest winter loss reported since the survey began 13 years ago and 8.9 percentage points higher than the survey average. Honey bees pollinate \$15 billion worth of food crops in the United States each year, so their health is critical to food production and supply.

““These results are very concerning, as high winter losses hit an industry already suffering from a decade of high winter losses,” says Dennis vanEngelsdorp, associate professor of entomology at the University of Maryland and president for the Bee Informed Partnership.

“During the 2018 summer season, beekeepers lost 20.5% of their colonies, which is slightly above the previous year’s summer loss rate of 17.1%, but about equal to the average loss rate

since the summer of 2011. Overall, the annual loss of 40.7% this last year represents a slight increase over the annual average of 38.7%.



Above, *Bee Losses, 2006 – 2019, BeeInformed Partnership:*  
<https://beeinformed.org/results/2018-2019/>

“Just looking at the overall picture and the 10-year trends, it’s disconcerting that we’re still seeing elevated losses after over a decade of survey and quite intense work to try to understand and reduce colony loss,” adds Geoffrey Williams, assistant professor of entomology at Auburn University and co-author of the survey. “We don’t seem to be making particularly great progress to reduce overall losses.”

“Since beekeepers began noticing dramatic losses in their colonies, state and federal agricultural agencies, university researchers, and the beekeeping industry have been working together to understand the cause and develop Best Management Practices to reduce losses. The annual colony loss survey, which has been conducted since 2006, has been an integral part of that effort.

“The survey asks commercial and backyard beekeeping operations to track the survival rates of their honey bee colonies. Nearly 4,700 beekeepers managing 319,787 colonies from all 50 states and the District of Columbia responded to this year’s survey, representing about 12% of the nation’s estimated 2.69 million managed colonies.



“The Bee Informed Partnership team says multiple factors are likely responsible for persistently high annual loss rates and this year’s jump in winter losses. They say a multi-pronged approach to research, Extension, and Best Management Practices is needed to combat the problem.

“The number one concern among beekeepers and a leading contributor to winter colony losses is varroa mites, lethal parasites that can readily spread from colony to colony. These mites have been decimating colonies for years, with institutions like the University of Maryland actively researching ways to combat them. “We are increasingly concerned about varroa mites and the viruses they spread, says vanEngelsdorp. “Last year, many beekeepers reported poor treatment efficacy, and limited field tests showed that products that once removed 90% of mites or more are now removing far fewer. Since these products are no longer working as well, the mite problem seems to be getting worse.”

““But mites are not the only problem,” continues vanEngelsdorp. “Land use changes have led to a lack of nutrition-rich pollen sources for bees, causing poor nutrition. Pesticide exposures, environmental factors, and beekeeping practices all play some role as well.”

“Karen Rennich, executive director for the Bee Informed Partnership and senior faculty specialist at the University of Maryland, elaborates on land use and environmental factors that may be significant, including increases in extreme weather.

““The tools that used to work for beekeepers seem to be failing, and that may be evident in this year's high losses. A persistent worry among beekeepers nationwide is that there are fewer and fewer favorable places for bees to land, and that is putting increased pressure on beekeepers who are already stretched to their limits to keep their bees alive,” says Rennich. “We also think that extreme weather conditions we have seen this past year demand investigation, such as wildfires that ravage the landscape and remove already limited forage, and floods that destroy crops causing losses for the farmer, for the beekeeper, and for the public.”

“According to Rennich and Williams, more research is needed to understand what role climate change and variable weather patterns play in honey bee colony losses.

““Beekeepers have to be very dynamic in their response to weather and environmental conditions,” explains Williams. “If it is a cold, long winter, beekeepers need to be very diligent and make sure they have enough food for their bees to survive. On the other hand, warm winters can create favorable conditions for varroa mites, which means beekeepers need to know how to manage them properly.”

“Williams and the other researchers on the survey team agree that in addition to understanding the impact of weather conditions, beekeepers need to stay current on science-based Best Management Practices.

““One of the best things that a beekeeper can do is implement Best Management Practices for their region, and they can find those through the Bee Informed website,” emphasizes vanEngelsdorp.

“The survey is conducted by the Bee Informed Partnership with data collected and analyzed by the University of Maryland and Auburn University. Survey results are available here on the Bee Informed website, with a summary provided below:

**Winter Loss Estimates:**

1 October 2018 – 1 April 2019: 37.7% losses

7 percentage points higher than winter 2017-2018

8.9 percentage points higher than average winter loss (2006-2019)

**Summer Loss Estimates:**

1 April 2018 – 1 October 2018: 20.5% losses

3.4 percentage points higher than summer 2017

Equal to average summer loss since summer survey began in 2011: 20.5%

**Total Annual Loss Estimates:**

1 April 2018 – 1 April 2019: 40.7% losses

0.6 percentage points higher than 2017-2018

2.9 percentage points higher loss since annual survey began in 2010-2011: 37.8%

**Winter Loss Comparison by Beekeeper Category:**

Backyard beekeepers (manage 50 or fewer colonies): 39.8%

Sideline (manage 51-500 colonies): 36.5%

Commercial (manage more than 500 colonies): 37.5%

Link: [https://mailchi.mp/dadant.com/abj-extra-june-20-2019-us-beekeepers-lost-over-40-of-colonies-during-the-last-year?fbclid=IwAR0Mjaup-0mNWMk3MmTgMi27EuF\\_2p0wpOdYLS-Bu9cfEGiFD9kjMRI0XE](https://mailchi.mp/dadant.com/abj-extra-june-20-2019-us-beekeepers-lost-over-40-of-colonies-during-the-last-year?fbclid=IwAR0Mjaup-0mNWMk3MmTgMi27EuF_2p0wpOdYLS-Bu9cfEGiFD9kjMRI0XE)



*Crop Spraying Outside St. Mary Bourne, National Geographic*

**“EPA will allow use of pesticide harmful to bees,” *The Hill*, June 17, 2019**

“The Environmental Protection Agency (EPA) said Monday it will allow states to use a pesticide that is harmful to bees.

“The agency made an emergency exception for 11 states to use sulfoxaflor on cotton and sorghum crops.

“The only emergency here is the Trump EPA’s reckless approval of this dangerous bee-killing pesticide,” Lori Ann Burd, environmental health director at the Center for Biological Diversity, said in a statement. “It’s sickening that even amid the current insect apocalypse, the EPA’s priority is protecting pesticide industry profits.”

“A study published in Nature last year found sulfoxaflor inhibited bumblebee reproduction.

“According to the Center for Biological Diversity, the emergency declaration has been used for four consecutive years in most of the states.

“Sulfoxaflor’s use was temporarily barred after a lawsuit from beekeepers in 2015, but the EPA in 2016 changed its instructions for how to use the pesticide in a way designed to reduce the impact on bees. Cotton and sorghum were not included in the directive.

“The EPA’s Office of Inspector General wrote in a report last year that the agency did not have processes in place to determine how its emergency measures impact human and environmental health.

“An EPA spokesperson said the emergency exemption was granted with public safety in mind, as well as the needs of farmers.

To read more, visit: [https://thehill.com/policy/energy-environment/448970-epa-will-allow-use-of-pesticide-harmful-to-bees?fbclid=IwAR3\\_jjoSLz6L9m6ZaRH3wgOrs2OIdiV8ptHszddKc881RjCqYXUVEwgHWY0](https://thehill.com/policy/energy-environment/448970-epa-will-allow-use-of-pesticide-harmful-to-bees?fbclid=IwAR3_jjoSLz6L9m6ZaRH3wgOrs2OIdiV8ptHszddKc881RjCqYXUVEwgHWY0)

**“California Almond Farmers Would Benefit from Increased Efforts To Protect Essential Bee Foraging Territory in Northern Prairie States,” Bee Culture, June 27, 2019**



*Above, “Honeybees depend on the flowers in the region for protein-rich pollen” (Jennie Durant; story starts next page)*

“California almond farmers who depend on commercial bee hives to pollinate their lucrative crops would benefit from increased efforts to protect essential bee foraging territory in northern prairie states, according a University of California, Berkeley, researcher.

“A new paper, published this week in the journal *Land Use Policy*, shows that a government program that pays farmers to let marginal farmland go fallow has protected a critical bee refuge that supports 40 percent of the country’s commercially managed honeybees.

“But changes to the program have imperiled the health of America’s commercial bee population, which is trucked around the country to pollinate some 30% of all major food crops, from California almonds to Florida oranges.

“Much attention has been paid to the role pesticides, parasites and disease play in the well-documented population declines of the honey bee, but less research has been done on the role land policy decisions have on bee populations, said Jennie Durant, a recent Ph.D. recipient from UC Berkeley’s Department of Environmental Science, Policy and Management.

“If we want to address bee declines, we need to pay attention to these land use trends, which also play an important role,” said Durant, who authored the paper with Clint Otto, a research ecologist with the U.S. Geological Survey.”

Durant and Otto examined the Conservation Reserve Program, a program started in 1985 to encourage farmers, many of whom grow corn and soy, to plant vegetative covers such as perennial grasses and bee habitat on lands that are difficult to productively farm.

To read more, visit: <https://www.beeculture.com/catch-the-buzz-california-almond-farmers-would-benefit-from-increased-efforts-to-protect-essential-bee-foraging-territory-in-northern-prairie-states/?fbclid=IwAR0VAqW5-wwaRtfGNFyB65viciKfLxkOCiWHsQAoik4Trx9uMvXsfRdg3IE>

*And now for some GOOD news:*

**“Attacking single gene in deadly parasite could protect honeybees from untreatable infection,” by Kim Kaplan, USDA, June 24, 2019:**

“Agricultural Research Service (ARS) scientists have taken the first step towards a weapon against the major honey bee parasite *Nosema ceranae*. There is currently no treatment for this parasite.

“The scientists found that feeding honey bees a small amount of an interfering RNA compound (RNAi) could disrupt the reproduction of *N. ceranae* by as much as 90 percent in the laboratory study, according to a study recently published in *Insect Molecular Biology*.

“This RNAi compound targets a single *N. ceranae* gene called Dicer, explained Jay Evans, research leader of the ARS Bee Research Laboratory in Beltsville, Maryland, who headed the study.

“Dicer is a critical part of *Nosema ceranae*’s machinery for defeating honey bees’ immune responses to infestation by these parasites. It also encodes an essential protein in *N. ceranae*’s reproduction. So, it could be a double-barreled, practical route for attacking *N. ceranae*. Even better, RNAi against Dicer is specific to the parasite and will not interfere with the health of the honey bees,” Evans said.”



To read more, visit: <https://geneticliteracyproject.org/2019/06/24/attacking-single-gene-in-deadly-parasite-could-protect-honeybees-from-untreatable-infection/?fbclid=IwAR0KkeynJkAhbAvCXEHoQFuw5uQQ9hBIKo9j6k0TDsIK8CY6C-YZeAUZ44E>

**“Bee Pollen: A Complete Guide Of The Supposed Health Benefits And How To Take It”  
Oola.com, Andrew Gremillion June 13, 2019.**

*Thanks to Phil Wilson for sharing this pollen story, link below: it has loads of documentation of the benefits of pollen, plus links to original sources like the NIH and Agricultural Research Service. Check this out so that you have some answers the next time someone asks you if pollen really helps allergies!*

[https://www.oola.com/day-to-day-life/2474931/bee-pollen-health-benefits-how-to-take-it/?utm\\_campaign=rola-aolc-d-us-c2442343&utm\\_content=2239&utm\\_source=aolc&utm\\_term=rola-aolc-d-us-c2442343.kautbwfp&fbclid=IwAR3NFn57YuPh4ff4Lp\\_TmUOpp15PYi7nLlsMI3mbsn3fItls6b3b5P--0H0](https://www.oola.com/day-to-day-life/2474931/bee-pollen-health-benefits-how-to-take-it/?utm_campaign=rola-aolc-d-us-c2442343&utm_content=2239&utm_source=aolc&utm_term=rola-aolc-d-us-c2442343.kautbwfp&fbclid=IwAR3NFn57YuPh4ff4Lp_TmUOpp15PYi7nLlsMI3mbsn3fItls6b3b5P--0H0)



*Above, “Pollen of various colours stored in the cells of a honeycomb near the brood. Some larvae can be seen, most of the brood cells are already capped.” Pollen of various colours stored in the cells of a honeycomb near the brood. Some larvae can be seen, most of the brood cells are already capped.” Image by [Waugenberg](#), [Wikimedia Commons](#), license [CC BY-SA 3.0](#).*

## ANNOUNCEMENTS

***Bruce Bray has bee equipment for sale:*** Bruce writes, “This last winter claimed both of my bee colonies. I am now in my mid seventies and working with even the six inch supers has become a bit of a problem for my back. So I am going to retire from my beekeeping operation. I have accumulated allot of beekeeping equipment over the years. I would like to get this equipment

into the hands of someone maybe just starting out or someone that is looking to expand their operation. My beekeeping operation was run out of my barn so none of the hives were ever outdoors. Allot of the equipment is new and never was in service and what is not new is in very good condition. I would sell all for around \$250.00 or best offer.” To contact Bruce, email [bbray@toledotel.com](mailto:bbray@toledotel.com) .

***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](mailto:silvercatfarm@gmail.com) or call 425 344 8058.

***Half Pints of Honey Wanted:*** Julie Gullett at Seedpod Farm has a request: "Bee-utiful Day to you all! Quick request for our fellow beekeepers- We are hosting a few groups from Summit Academy in Portland this summer. This is an inter-cultural exchange program for Chinese and American students ages 9-17. Kids and their host families will join us for on-farm experiences to learn about farming, permaculture, and stewardship. For one of the sessions, I am looking for honey samples from around the county for students to taste. I thought it would be a great opportunity to underscore the value of honeybees, habitat preservation and stewardship. Do you have a sample to share....maybe just 2-4oz for tasting? I'd be happy to compensate you. Thanks for your support- " To contact Julie, please email [info@seedpodfarm.com](mailto:info@seedpodfarm.com) or call (360) 807-4693.

***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.

***WASBA 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)***