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June/July 2015 LCBA Newsletter

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Questions? Suggestions? Resources you'd like to share, stories you'd like to tell?

Please contact LCBA Secretary Susanne Weil: susanne.beekeeper@gmail.com or call 360 880 8130.

UPCOMING EVENTS:

Saturday, July 11: LCBA's 7th Annual Summer Potluck

Come enjoy good food, good fellowship, & talk bees. Honey recipes always welcome!



Above left, LCBA members at our 2014 Summer Potluck at Lintott Alexander Park, Adna; right, the shelter at Lintott Alexander Park where we'll hold our July 11, 2015 Summer Potluck.

Where: Lintott Alexander Park, Shelter #2; 1101 Riverside Drive, Chehalis WA

When: 4 – 8 p.m.

Facilities: We'll have 10 large picnic tables & benches (altogether, the facility can accommodate 100), wood-burning stove, electrical outlets, outdoor faucet, garbage cans/liners.

Please bring: A dish to share, plate, cutlery – and family! LCBA will provide water, pop, napkins. Park management requests no alcohol at this event.

Drawing for 2016 Youth Scholarship Program: Fun items will be available for those who buy \$1 drawing tickets. We'd like to branch out to middle schools next year & fund more young people to get started with bees. If you'd like to help, please consider bringing an item to donate. So far, donated items include:

- 50 pound bag of sugar (gift certificate, Reichert's Distributing)
- \$30 gift certificate to Reichert's Meats
- 3 \$25 gift certificates to Beeline Apiaries in Rochester
- Bee veil from Kaijas
- 2 LCBA mugs
- Cedar hive box
- Top Feeder
- Bee escapes
 - *Thanks to Reichert's Distributing, Reichert's Meats, Beeline Apiaries, Kaijas, Copy Depot/Precision Printing, Dan Maughan, Martin Stenzig, & Peter Glover & Susanne Weil for items donated so far.*

Celebration! Apprentice Beekeepers' Diplomas from our spring course are here & will be distributed at the potluck. We also have name badges for new members. If you missed

getting your class diploma from a past class, or haven't yet picked up your name badge, come get it at our potluck (if you can't make it, please check with Susanne & we'll get it to you)

How to Enter Your Honey at the Fair – Queenline Jars available for members!
We'll have details about the honey judging contest, too.

Call for Volunteers for the Fair – signup sheets will be available if you'd like to join the fun at the Fair. LCBA provides admission tickets & parking passes for our volunteers.

Beekeeping Q&A ~ bring your questions!

Also Saturday, July 11: Honey Bee Waggle Dance ~ How Bees Communicate

When: 12 noon – 1 p.m. *(You could go to this talk, then come on down to LCBA's potluck for dinner ☺)*

Where: Eastside Urban Farm & Garden Center, 2326 – 4th Ave. E Olympia

Speaker: Dr. Danny Najera, Biology Department, Green River Community College. Dr. Najera, a pioneer in breaking the honey bee dance code, will explain all aspects of the waggle dance and how it communicates to the other bees the direction and distance to a food source. He will explain why the bees do the waggle dance, how the dance works, what does it mean, and what the sun and gravity have to do with it!!!

Registration: Visit southsoundseedcoalition.com for further information and registration.



Above, the beautiful bee yards at WSU-Pullman, managed by Dr. Steve Sheppard & his APIS lab, will be the site for Bee Field Days 2015,

Friday - Sunday, July 10 – 12: Bee Field Days at WSU-Pullman

Hosted by Washington State University's APIS Lab & Entomology Program

Fri. night, July 10, & Sat. July 11: Beekeeping Short Course, "Starting Right With Bees": Interested in starting some bee colonies or want more confidence in working and caring for these? This 2 day course will cover bee biology, pest/disease identification, colony management, honey bee IPM, and gloveless beekeeping. The format is a combination of instruction and hands on demonstration. Bring a bee veil, whatever protective clothing you are comfortable in, and lots of questions. *(More info next page)*

Instructors: Steve Sheppard, Susan Cobey & WSU Bee Lab. graduate students

Registration fees \$125. For a Registration Form, visit: <http://entomology.wsu.edu/apis/>

Mail to: Washington State University, Dept. of Entomology, Honey Bee Program, 166 FSHN, P.O. Box 646382. Pullman, WA 99164-6182

Sunday July 12: "Rearing High Quality Queens": Two, one day workshops in different locations will present what it takes to rear high quality queens. Basic biology and various methods of queen rearing will be presented. The workshops emphasize hands on instruction in queen rearing methods, with lecture and demonstrations. Students will be involved in various steps including: setting up cell builders, grafting, and establishing mating nuclei. Both queen right and queen-less systems will be demonstrated. Bring a bee veil and whatever protective clothing you are comfortable in.

Instructors: Steve Sheppard, Susan Cobey & WSU Bee Lab. graduate students

Registration fees \$175 For a Registration Form, visit: <http://entomology.wsu.edu/apis/>

Mail to: Washington State University, Dept. of Entomology, Honey Bee Program, 166 FSHN, P.O. Box 646382. Pullman, WA 99164

Saturday, July 18: LCBA Honey Supers Removal Workshop

When: 1 to 3 p.m.

Where: Adna (please RSVP to Susanne.beekeeper@gmail.com to get directions)

What: *Overview & demo of different ways to take off honey supers with minimal damage to your bees. We'll see the Fume Board method, the Bee Escape method, the Blower method, etc. We'll also discuss ways to store honey supers both prior to & after extracting. There will also be "Beekeeping Q&A" about general summertime management issues, so please bring your questions - & your protective gear ☺*



Above left, LCBA mentor Roy Schaafsma demonstrating fume boards at our 2013 supers removal workshop; right, a bee escape board at our 2014 workshop.

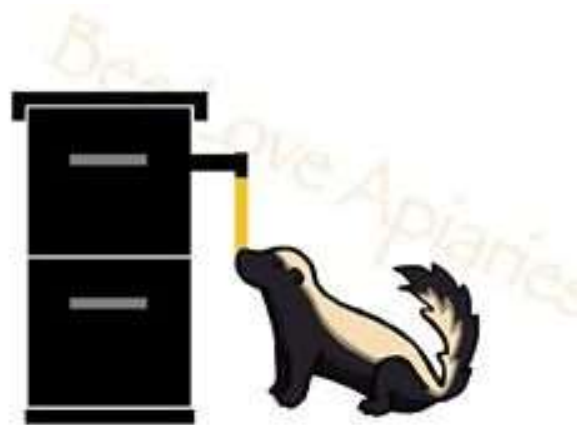


Above left, some of Steve Howard's colonies with honey supers on July 1; right, the "leaf blower method" for removing supers at our 2014 workshop – this will again be shown at our July 18 workshop.

Is It Time to Remove Your Honey Supers?

Thanks to our early spring & unusually balmy weather, some of our beekeepers are already removing their honey supers! LCBA mentor Steve Howard started writes, "This year I supered from the bottom up and used no queen excluder. Only going to remove half the supers on each hive now and the balance next month. Pulled seven supers today and the total gross weight is right at 350 pounds."

Steve favors the fume board, writing that it "takes less than 15 minutes a hive to push the bees down." As with most things bee, others favor different approaches: some prefer not to use chemicals and vouch for the bee escape board or the leaf blower methods. *See them all demonstrated at our July 18 workshop!*



Have you had the "Flow Hive" forwarded one too many times to your email or Facebook page? Here's some Flow Hive humor, courtesy of Jake Weil, West Coast Beekeepers Facebook group.

~ More Events, Next Page ~

Saturday, July 25: Sue Cobey Queen Rearing Workshop

Sponsor: Pierce County Beekeepers' Association

When: 9 a.m. – 2 p.m.

Where: WSU Extension Ctr, Puyallup Campus, 2606 West Pioneer, Puyallup, WA 98371.

What: Learn how to raise your own honey bee queens. Sue Cobey is a global authority in honey bee breeding, & her classes attract researchers and breeders worldwide. At WSU, Sue's focus is to enhance U.S. honey bee breeding stocks, incorporating imported European bee subspecies germplasm into U.S. breeding stocks. She will cover queen breeding biology, demonstrate how to graft, review WSU's genetics program, & talk about the importance of raising local queens.

Registration: \$40 general public; lunch included, to be served during Q&A with Sue, 1 - 2 pm. Space limited: visit: <http://pcbeekeepers.org/events/sue-cobey-queen-rearing-workshop>

Wednesday, August 13: LCBA Monthly Meeting

**Topic: Mite Control Management & Other Fall Management Issues.
Discussion of Varroa control v.s. eradication. Q&A on fall management.**

When: 6 – 8:45 p.m.: Social Time 6 to 6:30 p.m.

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

What: LCBA President Norm Switzler & Community Outreach Coordinator Dan Maughan will present some mite management philosophies & lead a discussion of pros/cons of treatment. Please bring your mite experiences & questions! Also, we'll have general beekeeping Q&A re: preparing for fall management. Short business meeting with latest Southwest WA Fair news.



Above left, "[Honey bee with Deformed Wing Virus and Varroa destructor on her torso,](#)" by Stefan de Konink (License: [CC0 1.0 Universal](#)).

Above right, "[Visible as a dark, oval shape, an adult female varroa mite feeds on the midsection of a developing worker bee,](#)" photo by Scott Bauer, USDA (License: [CC0 1.0 Universal](#)).

LCBA Will Bee at the 2015 Southwest Washington Fair, Aug. 18-23!



Left, SW WA Fair 2015 Logo; right, LCBA mentor Mel Grigorich explains bee behavior in the observation hive at LCBA's booth during last summer's Fair.

Call for Volunteers for LCBA Exhibit

The Fair is one of LCBA's best opportunities to help our Lewis County neighbors learn about honey bees – and have fun while we do it! We'll have a sign up sheet for days & times at the Potluck, but if you can't come on July 11 and would still like to help at the Fair, email Susanne at Susanne.beekeeper@gmail.com or Dan at ultramafic@netzero.net.

We'll have our Observation Hive; the now-famous Reichert-Inmon wild hive & paper wasp nest display; a sample Langstroth hive set up (without bees!), tools & gear, & lots of visual displays & items to give away from the National Honey Board, Burpees Seeds, & our own informational brochures & handouts. If you have a cool idea for a display, please share that too!

Fair Honey Judging Contests – How to Enter

LCBA has TWO honey contests at the Fair. The first is the official Fair Honey Contest; the second is our People's Choice Honey Tasting. Read on for details!

Contest #1: The Official Fair Honey Contest – Submission Process & Judging Criteria

FYI: Entrants must submit honey in 1-pound Queenline glass jars (available free to LCBA members – contact 360 880 8130 or email Susanne.beekeeper@gmail.com)

Submission time: Entries accepted Mon. 8/17, 12 noon – 7 p.m. in the Floral Hall, SW Washington Fairgrounds. **No entry fee.**

Release Time: Sunday 8/23, from 2 to 5 p.m.; or contact Susanne (see above) for pickup.

What you can enter: The Fair's contest features raw honey - not processed or heated. Bee products fall under Division G-01 (Grain-Forage-Farm Products), Class 1 – Bee Products. You can enter honey under one of these 6 categories: please, no identifying labels on your entry! (see next page)

- Lot 1, Comb honey with sample; (continued next page)
- Lot 2, Raw honey Light with sample in 1 pound Queenline jar.
- Lot 3. Raw honey Amber with sample in 1 pound Queenline jar
- Lot 4. Raw Honey Dark with sample in 1 pound Queenline jar
- Lot 5. Wax
- Lot 6. Other (this could be any bee-related item, like homemade equipment, a bumblebee nest, etc.)

Honey Judging Criteria:

- Color –3 classifications: light, amber, & dark, using Jack’s Scale
- Entries over 18.6% moisture are disqualified (a refractometer will be used to measure moisture content)
- Filtration: 400 micron filtration is maximum
- Crystallization will be marked down this year
- Judge will taste for scorching only (taste is subjective)
- Precise jar filling: head room between 3/8 inch & half an inch with no visible gap between honey level & cap
- Judge: Peter Glover, LCBA Education Coordinator



Above left, Michaela with her prize-winning honey at the 2014 Fair. Michaela harvested her first honey in 2013, and spun it at our honey extraction workshop that year; she entered it last summer and was one of our winners.

Above right, our official Fair honey display & winners' ribbons.

SEE NEXT PAGE FOR PEOPLE'S CHOICE HONEY TASTING INFO. . .

Contest #2: The People's Choice Honey Tasting

This contest showcases raw honey that has not been heated or processed so that the public can experience true honey flavors.

- Judging takes place Saturday, Aug 22, 1 p.m., at the Floral Building. Our visitors do the judging based on flavor & aroma – honey is labeled by number only, & visitors put their voting ticket in the can next to their favorite honey.
- To submit honey for People's Choice Tasting Contest, please bring a half-pint glass jar of honey to the Fair on Monday, August 17: entries accepted from 12 noon – 7 pm in the Floral Hall; if this time won't work for you, contact Susanne – see below. Please . . . no labels to give your identity away! There is no entry fee.
- Retrieving your honey: sorry . . . it's pretty unlikely that any of your honey will be left to pick up ☺
- Questions? Contact LCBA Secretary Susanne Weil, 360 880 8130 or email Susanne.beekeeper@gmail.com.



Above left, the 2014 People's Choice Honey Tasting; right, LCBA mentor & Fair volunteer Steve Howard explaining how raw honey is different from what you get in the supermarket bear. . . .

Washington State Fair Honey Show in Puyallup

If you'd like to enter your honey in Puyallup, here's how:

LCBA member Louis Matej, our May speaker on the chemistry of pollen, honey, and wax, is also Assistant Superintendent of Agriculture at the Washington State Fair in Puyallup. If you'd like to enter your honey or wax products in the Washington State Fair Honey Show, send your exhibit to Louis, and he'll make sure it is entered (address: Louis Matej, 445 S. 96th St., Tacoma, WA 98444; see below re: tips on mailing honey).

The Washington State Fair Honey Show is statewide and open to all Novice and Open Class Exhibitors. They award "Best of Show", "Novice Best of Show", "Best in Honey, Wax, etc." Ribbons (see "Premium List" on their website, noted below). *More info next page:*

To enter, you must register your entry online before sending it to Louis. Louis will save your exhibits after the Fair and return them when he can, probably at one of LCBA's monthly meetings, along with any ribbons your entry may win. (Prize money is sent by the Fair via mail.)

A big caution about mailing honey: Louis notes, "I would make sure the bottles have tops that are clean since there would be some turn over in shipping."

If you would rather visit Puyallup and submit your honey or wax products in person, you can bring in your entries to the Fair - entry days are Sept 8 and Sept 9 in the Puyallup State Fairgrounds Agriculture building.

The Honey Show Cabinets will be located outside the Pierce County Beekeepers' Association booth with an exhibit representing all beekeeping associations in the state who send materials (Louis will have LCBA brochures & cards.)

To enter your honey:

1. Go to the "thefair.com" website and click on Competitive Exhibit Entry and click on the Honey Show Premium List for all the rules and regulations.
2. Register online with your exhibits
3. Bring your exhibits to the fair on Tuesday, Sept 8 or Wednesday Sept 9.
4. You will receive free tickets to the fair for your entry.
5. Judging takes place on Thursday morning, Sept 10.
6. View the display cabinet and pick up your ribbons in the Ag Office.
7. You may pick up your exhibits after the fair on the Monday following the fair.

If we receive exhibits through the mail, we cannot send them back in the mail. The fair only sends out monetary awards.

LCBA MONTHLY MEETING NOTES: May 13TH



Above, Master Beekeeper Louis Matej was our May 13 speaker.

Speaker & Topic: Master Beekeeper Louis Matej; The Chemistry of Honey, Pollen, & Wax

LCBA President Norm Switzler introduced longtime beekeeper Louis Matej, who joined LCBA this spring. For many years, Louis coordinated WSBA's entire Master Beekeepers' education program and still processes the Apprentice progress reports throughout the state. Louis noted that the WSBA Journeyman and Master Beekeepers' resource books are now

available online (visit www.wasba.org and click on “Master Beekeepers” to read the guidelines). Anyone who wishes to tackle the Master’s level may write to Bob Combs, chair of the Master Beekeepers Committee (bob@combshoney.com); Bob will set you up with a facilitator.

Among the many hats he wears, Louis is also the assistant superintendent of the Washington State Fair at Puyallup: he has invited LCBA to participate in the State Fair – we can have a booth with the LCBA banner or simply join in with Pierce County and display our materials. Louis also offered to facilitate LCBA members entering honey in the State Fair contest – see details in the section above.

Louis reminisced about his start in beekeeping 40 years ago, when a swarm came to his parents’ back yard in Enumclaw. That was in 1973, and beekeeping has changed tremendously since then! Louis can remember Sears catalogs advertising packages of bees for \$25 – now not only the prices, but the labor in trying to keep our bees alive are very different.

Louis is a beekeeper by avocation, but a chemist by training, and when he started this study, he was working at Madigan Hospital. He urges beekeepers to familiarize themselves with the basic chemistry that governs how our bees utilize both the substances they gather – nectar, pollen, propolis, and water – and those they produce – honey, beeswax, royal jelly, pheromones, and venom. Louis has shared his slideshow with us: it is attached in PDF form to this newsletter mailing, and up on our website under the Monthly Meetings link, as well. The slideshow is very succinct, so what follows here are some key take-home points:



Above, [“Organic Honey.”](#) by by Thomas Zimmermann (THWZ) Licensed under [CC BY-SA 3.0](#)

CHEMISTRY OF NECTAR AND HONEY:

- The total sugar concentration in nectar ranges widely, from 4 to over 80%. However, bees seldom select nectar under 15% sugar unless the colony is under severe pressure, so be careful where you put your hives: insufficient nectar/sugar will strain a colony!
- If you plant to support your bees, select forage that has a high percentage of sugar: see the chart in the slideshow that breaks down what plants yield the highest percentages of sugar.

- Honey has 87 to 98 percent sugar, so bees must eliminate 47 to 68 percent of water in the nectar.
- Feeding bees: their needs are different in spring and in fall. Louis experimented with 2 parts water to one part sugar: it's 34% sugar concentration for 100 ml of sugar. For 1:2, it's 89.4%. Spring feed mixture stimulates queens to lay more eggs.
- One bee normally gathers more nectar than it can process itself, so she passes excess nectar to her hive mates. How is the water content lowered? First step: water is absorbed out of the honey sacs of the bees, and the concentration of sugars increases – dialysis. Second: after storing nectar in cells, bees drive off water by air movement and heat: this is desiccation, not evaporation.
- Supersaturation: honey is a supersaturated sugar solution: the sugar concentration in honey is higher than what it could be without help of honeybees.
- Honey is hygroscopic (hydrophilic): this means that it absorbs water readily if left uncovered (leading to crystallization). Bees cap honey cells to prevent water absorption. Spoilage takes place due to bacterial/fungal contamination, as well as from fermentation from yeasts. American Foulbrood larvae form spores and can survive because of this hygroscopic nature of honey, so if foulbrood enters your colony, you must get rid of all honey along with the hive.



Above left, "A photo of crystallized honey - you can see fractal structure," by [Stevo-88](#) (License: public domain). Above right, "[Crystallized honey, both in the jar and out of it. The inset show a close-up of the crystallized honey, magnified at 50x.](#)" by Zaereth (License: [public domain](#)).

- The slideshow contains a diagram of the chemical structure of glucose and fructose. Honey contains 31% glucose and 38% fructose. Glucose is the main sugar used by all living organisms to produce heat and motion and metabolize. A graph shows the percentage of glucose and fructose in various honeys.
- Why is it bad to heat honey? It's all about enzymes. The two most important enzymes in honey production are invertase (sucrase), a protein secreted from the bee's salivary gland into the honey sac: it helps break sucrose down into glucose and fructose. Invertase will continue to break down sucrose, and honey will ripen over time, even after it is spun. However, heat will destroy invertase, and this is why heating honey is so bad.

- Hydrogen peroxide inhibits growth of bacteria, fungus, yeasts. Glucose oxidase activity helps preserve honey by producing hydrogen peroxide.
- Gluconic acid and other carboxylic or organic acids in honey account for the acid pH of honey, which ranges from 3.2 to 4.5. The pH range also contributes to different honey tastes.
- Acids naturally present in honey include formic and oxalic acid, which are used in mite control. The acidic nature of honey has an inhibitory effect on many pathogens. Sweetness of honey offsets the acidic nature of honey. Honey is close to vinegar in acid level!
- Metabolism or catabolism of glucose: why do honey bees need glucose all year round? Bees use glucose – as most living creatures do – to make ATP, which organisms break down to produce heat and energy. The slideshow contains the details of how bees use ATP to produce heat in the hive. In the bees' mitochondria, they finalize conversion of glucose into energy. The produced NADH and FADH₂ release stored chemical energy by converting it into ATP, directly used by cells to let bee move and metabolize other reactions like synthesizing beeswax or pheromones.
- The metabolic rate derived from glucose metabolism in bee wing muscles is three times as efficient as in wing muscles of hummingbirds, and 30 times more efficient than that in active human muscles.
- See the slideshow's chart of chemicals in different kinds of honey and how it relates to color.



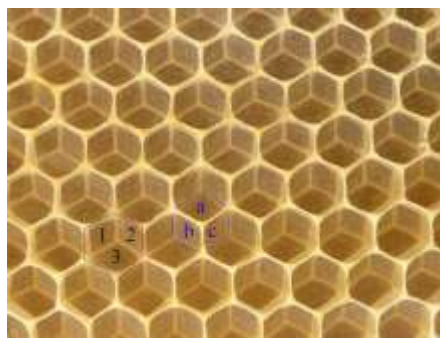
Above left, ["Pollen of various colours stored in the cells of a honeycomb near the brood. Some larvae can be seen, most of the brood cells are already capped."](#) By [Waugenberg](#) (License: [CC BY-SA 3.0](#));

Above right, ["Pollen of Phacelia collected by bees,"](#) by [Zonki](#) ([Klaus Gebhart](#), bee keeper, [Jockgrim](#); License, [CC BY-SA 3.0](#))

CHEMISTRY OF POLLEN

- Pollen is 8 to 40% protein, but also 15 to 45% carbohydrates, and 1 to 15 percent lipids (fat compounds). Entomophilous pollen is insect-transferred: heavier, stickier, and more colorful, in shades of yellow, orange, brown, black, and red. But anemophilous pollen is wind- transferred and lighter, less colorful.

- Bees get 100% of their protein for brood production and metabolism from natural pollen, pollen substitutes, or pollen supplements. A pollen supplement is a pollen substitute with some natural pollen in it.
- Pears are low in sugar concentration, but very high in pollen.
- Bees in a pine forest will not get much protein because there is only 8% crude protein in pine pollen (see the graph in the slideshow for more details on what kinds of pollen yield the most protein).
- Amino acids, especially the 10 essential ones, must be randomly available for protein synthesis to occur: the amino acids from pollen are essential to translate proteins in honey bee cells.
- Judging pollen for quality: fair sources contain 10% protein, good 20%, very good over 25% See the chart: what is interesting is that some pollens have some amino acids, but not others, so bees need diverse nutrition.



Above, "Bienenwabe im Bau 51a" by Waugsberg - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons.

https://commons.wikimedia.org/wiki/File:Bienenwabe_im_Bau_51a.jpg#/media/File:Bienenwabe_im_Bau_51a.jpg

CHEMISTRY OF BEESWAX

- Louis is fascinated by this because honey bees are not only chemical, but mechanical engineers. The hexagon shape is almost round at the end that is open. Almost one third of the cell behind is shared with other cells, so the comb is so strong, yet lightweight. How do bees make wax to be this strong that it can even withstand spinning in an extractor?
- Chemistry of beeswax – wax is synthesized by 4 pairs of wax-secreting epidermal glands on the ventral side of the workers' abdomens. Beeswax is made of a complex mix of over 300 chemicals. Beeswax is mainly comprised of esters: very aromatic liquids that are produced from carboxylic acid plus alcohol.
- Physical properties of beeswax: its melting point is 61.7 to 62.8 degrees Centigrade, and it is highly flammable.

For more details, see Louis's very informative slideshow!

Q & A:

- Heat destroys enzymes, but how much heat can you use to reverse honey crystallization without ruining it? Louis says that you can't un-crystallize honey

without heating it: if you heat honey to 100 degrees, not boiling, but heat lightly, that will be ok to help stop honey from crystallizing. It is ok to have some higher sugars in honey.

- The guts of most animals use bacteria to break down foods, yet honey is antimicrobial, so is there any bacteria in honey? Louis answered that the honey bee doesn't need bacteria from honey: they get sucrose, etc., directly from the nectar they eat.
- Dan Maughan commented that he raises cattle, and when he puts out cracked corn, bees come out in winter and love to roll in the cracked corn, and even bring it to the hive: he finds it in the comb itself. Why are they attracted to cracked corn? Louis thinks that they are getting minerals and other things they need in addition to the protein in the pollen, perhaps to help produce the enzymes etc. This might be a research topic for a Master Beekeepers' project!



Above, bees on cracked corn, by LCBA member Sue Allen

- Sunflower nectar: what is the glucose content? Louis didn't have the exact #, but it can be found on the Internet. The average is about 35%.
- Tom Mayberry asked what bees get out of scotch broom flowers? Dan noted that there are structures in scotch broom that repel bees. But Gottfried has scotch broom nearby and sees bees coming back covered in yellow, and Norm has seen it too. He is sure it is not dandelion pollen. Louis thinks that broom must be a pollen, not a nectar crop. Norm has seen bees dive into high protein chicken feed, like they do cracked corn. Cody Warren observed that the pollen of broom is bright orange if you break open the flower: "My bees are Cheet-ohs," he quipped.
- Sally Weber asked if the diving could in a way to control varroa mites – if the bees coat themselves in pollen, would that make it harder for the phoretic mites to stick? Susanne asked if, perhaps, since Varroa deplete bees' ability to synthesize the key protein vitagellin, could they be protein deprived and thus more attracted to these

things? Louis noted that this could be another great research project for a Master Beekeeper certification.

May Business Meeting Notes

President Norm Switzler announced recent changes on LCBA's board of directors. Education Coordinator Tomme Trikosko, Mentorship Coordinator Kent Yates, and Vice President Dave Gaston have stepped down; Norm thanked them for their service to the association. Norm welcomed new board officers: Vice President Kevin Reichert, Mentorship Coordinator Martin Stenzig, and Education Coordinator Peter Glover. Also, Norm announced that Marcelle Stenzig and Susanne Weil will coordinate the club's Facebook page.

Treasurer's Report: Treasurer Rick Battin was attending a forestry stewardship class, so Susanne gave his emailed report: our account balance is \$4,972.31, and the Youth Scholarship fund is \$755.53. LCBA patches & iron-on transfers will be available starting at our June monthly meeting.

May 30 Hive Inspection Workshop: Our next hive inspection workshop was announced. *Post-meeting note:* over 20 beekeepers attended the workshop at Rose of Sharon Farm's apiary, assisted by 5 mentors. As President Norm was explaining the importance of hive inspection to prevent bees from swarming, one of the workshop attendees spotted a swarm in progress from one of the colonies on site; another swarm simultaneously alighted in a tree in another part of the apiary, so attendees got first-hand experience at swarm collection (see photos, below). We inspected colonies, checkerboarded frames, added boxes and honey supers, and had a relaxing Q&A time with refreshments in the shade after we closed up the hive boxes. Many thanks to LCBA's founding president Bob Harris for hosting us!



Above left, Nancy Toenyan & other workshop attendees observe Swarm #1 at the May 30 workshop as Norm & others were getting a nuc box together; right, LCBA treasurer & mentor Rick Battin sizing up Swarm #2 for hiving. These impromptu swarms made this workshop especially fun & informative!

Spring Youth Fair – Report: Community Outreach Coordinator Dan Maughan reported that LCBA's observation hive was a big draw at the Youth Fair. Our booth was well attended throughout, especially on Saturday. Dan thanked the dozen LCBA volunteers who turned out to help & loaned gear to make our display effective: Terrie & Michaela Phillips, Ed Odell, Chuck Ament, Gottfried Fritz, Gordon Bellevue, Mel Grigorich, Joevanie Montalvo, Peter Glover, and Susanne Weil for staffing the booth.. Dan gave special thanks to Sharette Giese for loaning interactive bee games, and to Gottfried Fritz, who brought comb with maple honey for kids of all

ages to taste and enjoy! Susanne offered up particular thanks to Dan for a nice job organizing (for photos, see our April-May 2015 LCBA Newsletter).

2015 Youth Scholarship Program update: Jana Girt & mom Janelle are continuing to be successful with their colony. They attended the hive inspection workshop in Adna on April 18; then Jana did her own inspection on April 19 with Janelle and Susanne watching. These bees had built up beautifully just 12 days after the package was hived. They put on the 2nd medium brood box and were still feeding sugar syrup with honey-b-healthy to help the bees draw comb. *Post meeting note: Jana's bees have continued to build up nicely; the 3rd medium brood box went on May 10. There was some cross-combing in the bottom box, and Susanne showed Jana how to do corrections. We also inserted a sticky board to test for mites and found none after 48 hours, so these are quite healthy bees so far. Jana and her mom will be volunteering at LCBA's booth at the Southwest Washington Fair on children's day, August 18.*



Above, 2015 Youth Scholarship Program student Jana Girt and mom Janelle inspecting their bees.

Beekeeping Q&A: Swarm World! While there were plenty of bee questions at this meeting, the top subject was swarms happening everywhere! Members reported their assorted captures. Kevin Reichert had been capturing swarms 24/7, or that was what it felt like – his phone has been ringing off its hook, and he's almost out of woodenware. Michaela and Terrie Phillips found one of their colonies that had swarmed – but the bees were clustered on the ground. With rain coming, they just put a hive box and cover over these bees, leaving sticks beneath so the rest could recruit in – which, sure enough, they did, so Michaela was able to save these bees and re-hive them. Chuck Ament told his tale of capturing a swarm off the junior Yard Bird – though this colony didn't stick around, he got some great photos, and had quite the crowd at Yard Birds watching the whole procedure. Gottfried Fritz captured three, count 'em, hives at his nephew's home in Mossyrock. Susanne got a call on May Day from Providence Hospital, where nurses were concerned about a swarm not far from the main entrance: the bees were easily captured from a low-hanging branch and lowered into a nuc box, and Susanne got to give an impromptu "Bee 101" Q&A to observers while the rest recruited to their queen. Many members had been having fun with swarms!

Tales of queens: Norm told an amazing story of visiting the Warners, who were trying to prevent a hive from swarming. They cut out three queen cells and gave them to Norm: while stopping at a drive-through to pick up dinner, Norm reached over for his wallet – and saw one of

the queens hatching out, right in his passenger seat! All three, thanks to the heat, hatched out before he got home. Two didn't make it, but one he successfully installed in one of his colonies. There was a question about whether putting a frame of open brood in a swarm would give them bees to care for, thus more reason to stay; Norm noted that he'd heard that some queens won't lay where other queens' brood and pheromones are (in a case of normal swarming or supersedure, the successor queens are daughters of the previous queen, so the pheromones may not smell so different).



Above left, bee swarm bearding on the Baby Yard Bird (photo, Kathleen Ament); right, Norm capturing a swarm using his net & extension pole (photo, John Blacklaw)



Above left, Susanne lowering a swarm into a nuc box at Providence Hospital on May 1 (the "May Day Girls"); right, Kevin Reichert rescued this lovely swarm covering two mailboxes (photo, Renee Baldwin)

Disk reducers to prevent swarming? Cody Warren reported that to try to prevent queens from absconding, he's trying a disk reducer, a dial that you insert into a hole in the hive – it can be dilated or contracted for ventilation, but set at a size that would not allow the queen to leave. He's been using this with captured swarms in nucs while they settle in, and then removes it when he places them in full scale hives in their permanent location.

Mite-Away Quick Strips: Dan Maughan noted that he tried MAQS on an 80-degree day, using one strip, not two – the next day, at 8 a.m., the bees swarmed out under his kitchen window. He got them onto a shovel and re-hived them – they marched right in, so probably he had the queen. Still, it seemed that the MAQs might have precipitated the colony's swarming.

What to do about people spraying pesticides on trees & crops? Especially for those of us living near Christmas tree farms, this is a danger to our bees. Norm recommends that beekeepers talk to neighbors and, if they can't be dissuaded from spraying, if they at least tell the beekeepers the day before, we can insert screens across entrances and keep the bees in the hive yet ventilated till the spraying incident is over.



Wednesday, June 10 Monthly Meeting:

Speaker, Dr. Dewey Caron: “2014-2015 Bee Losses for Lewis Co data from the Pacific North West Honey Bee Loss Survey”

LCBA President Norm Switzler welcomed Dr. Dewey Caron back to LCBA. For those who haven't heard him speak before, Dewey is emeritus professor of entomology from the University of Delaware and author of numerous books about bees (several of which he had for sale at a discount for LCBA – if you missed the meeting but would like to know more, email Susanne). In his “retirement,” Dewey buzzes between Bolivia and the U.S., teaching about beekeeping practices and researching bee losses. He's also one of the guiding lights behind the BeeInformed.org research group.

Two studies of bee losses: Dewey presented results from two studies of 2014-15 honey bee losses: one specifically surveying Pacific Northwest beekeepers, the other BeeInformed's national survey. ***Dewey shared his data with us – for more specifics, please see the PDF of his slideshow, attached to our newsletter mailing.*** In the first survey, 13 bee associations were represented, including LCBA and Clark County. Many respondents were relatively new to

beekeeping (45% had 1 to 3 years of experience and, on average, respondents had 4.2 colonies). On average, 69% of respondents reported having a mentor, but 100% of Lewis County respondents had one. Club meetings, the Master Beekeepers' course, and online readings were the other major ways Lewis County respondents reported getting their bee information, so Dewey complimented LCBA on doing a good job of supporting new beekeepers.

Bee Loss Data: Dewey's surveys focused, though, on everyone's major concern: bee losses. He compared our Lewis County rates with those for the Pacific Northwest respondents as a whole. Though there were only 7 respondents from LC, this is "a snapshot," indicative rather than definitive, so if you are looking for trends, it's better to look at the more robust regional data. In his Pacific Northwest survey, the overall winter loss rate was 29% - for Lewis County, it was 18% - or, depending on how you look at it, a 82% *survival* rate, so LC respondents were evidently doing some things more successfully. ***Next year, please take part in these surveys to help us get a clearer idea how Lewis County fits in the Pacific Northwest & national pictures!***

Colony losses by origin: The Pacific NW data sample covered 1274 colonies and broke them down by colony origin: packages; nucs; swarms; splits / divides / feral hive transfers or cutouts. One really striking result is that overall, in the PNW, *almost half of packages (46%) and imported nucs (42%) are lost over winter.*

Dewey compared Lewis County losses with losses reported over the 2014-15 winter by all Pacific Northwest respondents: details are in the attached PDF file. For PNW respondents overall, 29% of bees overwintered from 2013 were lost, compared with 20% of these in the Lewis County sample. For PNW respondents overall, 46% of packages bought in 2014 were lost: LC, 22%. For PNW respondents overall, 42% of imported nucs were lost, compared with 0% in LC data (however, only 5 of the LC colonies were nucs). For PNW respondents overall, 40% of swarms hived in 2014 were lost; 29% in LC. For PNW overall, 30% of splits/divides were lost, compared with 0% in LC (however, only 4 colonies in the LC sample were splits/divides). For PNW overall, 26% of feral hive transfers / cutouts were lost, compared with 50% in LC (however, only 2 colonies in the LC data sample were from cutouts).

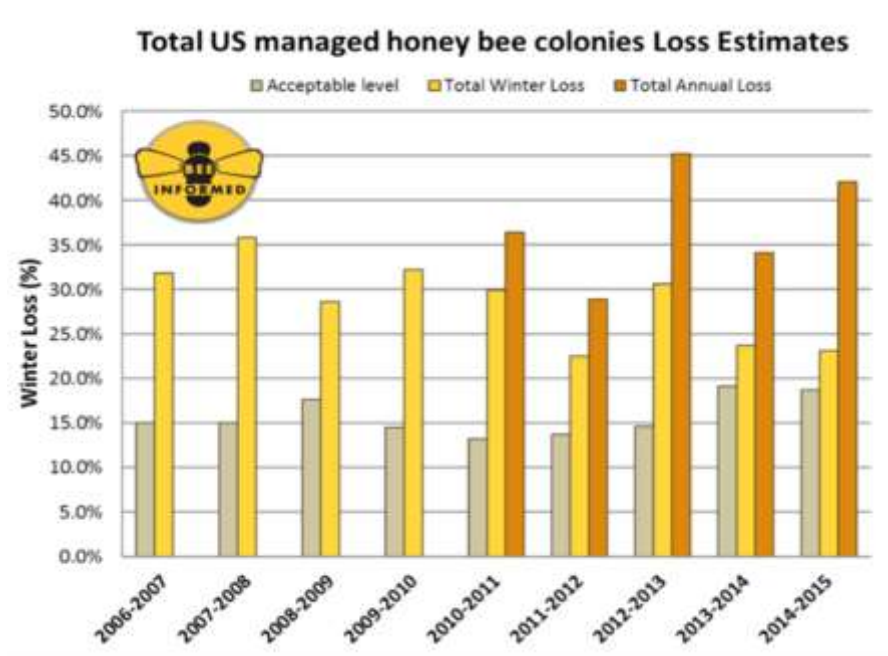
Colony losses by type of hive: Data were broken down by hive types: Langstroth 8 frame v. 10 frame, 5 frame nucs, top bar, Warre, and "other." Overall, data showed that the choice of 8 v. 10 frame hive boxes makes no difference in overwintering success, so those who prefer the management advantages of 8 frames are not at greater risk of overwintering loss.

Again, Dewey broke out the Lewis County data and contrasted it with data for all Pacific Northwest respondents. PNW respondents reported that they lost 20% of colonies kept in 8-frame Langstroth colonies; no LC respondents reported losses of colonies in 8 frames. PNW respondents reported that they lost 27% of colonies in 10-frame Langstroths; LC respondents, 16%. PNW respondents reported that they lost 53% of colonies kept in 5 frame nucs; LC, 0%. PNW respondents reported that they lost 49% of colonies kept in top bar hives; LC, 50% (however, this 50% reflects 1 of 2 reported colonies in top bars). For more details, see the attached PDF file.

Nationwide data from BeeInformed.org: In 2014-15, total annual losses were 42%; total winter losses were 23%. The 9 year average losses are 37% annual and 29% winter. BeeInformed started gathering data contrasting year-round with winter losses in 2010-11, and while the data show that on average, most of our bee losses take place in winter, losses outside

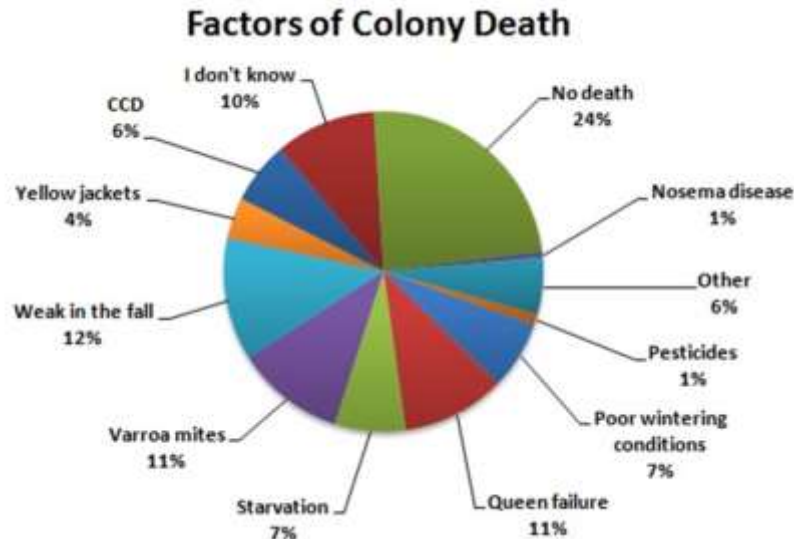
that season are not trivial, either. Backyard or hobbyist beekeepers have heavier losses in winter; commercial beekeepers have higher losses in “bee season.” One interesting finding: what individual beekeepers see as acceptable losses has gone up from about 12% in 2010-11 to about 17% now. Lewis County did better than the national average in Dewey’s survey (at least, the 7 who responded did better). Brian Moog asked whether overall losses are trending upward, and Dewey said that though they’ve only been asking about year-round losses for 5 years, the data do point up.

The attached PDF also shows losses state by state. The U.S. Midwest is a bee bloodbath, with losses in the 70% range. Washingtonians were well represented in this national survey: sadly, though, we are losing more bees than Oregon or Idaho. BeeInformed also looked at Washington backyarders, who had 25% losses in 2015; the Pacific Northwest generally had 15.7% losses. In 2015, Washington commercial-semi-commercial beekeepers lost 22%, compared with 23.1% national losses for this group. Dewey noted that commercial beekeepers will have pallets with a certain number of colonies, and no one is verifying numbers with them any more than they with do with backyarders. No one really knows how many colonies are in Washington. The BeeInformed survey estimates - emphasize *estimates* - the percentage of colonies.



Factors beekeepers see in colony losses: See the pie chart, below: respondents saw fall weakness, queen failure, and Varroa mites as the top three factors in their bee losses. However, “I don’t know” ran close behind. “Other” included bear attacks and “beekeeper stupidity.”

How do management practices affect colony losses? Dewey is trying to put things together, but correlation is not necessarily causation. Don’t assume that if you do x, you won’t have losses; the data mean that *some people* doing x may have lower (or higher) losses. Still, the data can help us think about what we are doing and perhaps should be doing.



Mite monitoring management: What can you do? Dewey urges: KNOW YOUR MITE NUMBERS and use those numbers to monitor if what you did for mite control helped. You might actively choose to treat or not to treat a colony, but if you don't sample your bees for mites before and after, you don't know how your approach worked. The main mite monitoring approaches reported by respondents were sticky boards (65%); alcohol wash shake (10%); powdered sugar shake (32%); visual inspection of drone brood (43%); and visual inspection of adult bees (47%). Most monitoring was done in July, August, or September.

Most effective mite sampling methods: Two methods of sampling have proven to be more effective: the sugar shake and the alcohol wash (see next page for photo; URLs for videos on both methods are in LCBA's April-May 2015 newsletter). A colony is holding its own against mites if the sampling is below 2% in spring and below 5% in the critical August-September samplings. 2% means 6 mites to 100 bees; no more than 15 mites to 100 bees would be 5%. With the sugar shake method, one advantage is that the bees stay alive; with the alcohol wash, they die. Diagrams for Dewey's sampling jars are in the attached PDF file.

Less effective mite monitoring methods: There can be so much detritus on a sticky board that picking out the mites can be hard, especially for new beekeepers, whereas with the alcohol sample, the mites are released from bodies of adult workers – when you pour the fluid out, you can see and count the mites. Visual sampling is not accurate: most mites are not on the adult bees, but in the brood. Even looking at drone brood is not effective: if you do that, though, look at what percentage of drone cells had mites.

Management questions: did people use candy, drivert sugar, frames of pollen, pollen patties, sugar syrup, or none of the above? What about wintering practices: did beekeepers insulate hives, equalize hive strength, add upper entrance access, provide a rain shelter, give ventilation, or use a quilt box? Are we doing the sanitary practices we would in animal husbandry with our bees? Do we clean hive tool between inspecting different hives? When we take a frame from one to another do we know that hive is healthy? Dewey tries to compare loss rates with these assorted methods, but again, he cautioned, this is correlation, not necessarily causation. In PNW survey, Dewey asked about sanitation practices and mite control. Some respondents are doing nothing; very many use screen bottom boards; some remove drone brood (for data, see the bar chart in the PDF).



Above left, sugar shake mite sampling method; right, alcohol wash method.

Things you can do to improve winter success: Moisture kills bees, not cold, so locate your hives out of the wind, in the sun, and protected. Use screened bottom boards and top ventilation. Use screen tops with moisture collector: burlap, straw, old towels, etc. Feed bees to insure enough food stores. These are keys in terms of what you might be thinking of doing.

95% of respondents use screened bottom boards. The 5% who don't use them had similar loss rates. But what about regional variations? In southern states, screened bottom boards did not make a difference, but in northern states, data showed 12.4% reduction of losses reported by those who used screen bottom boards.

Drone brood removal: You can buy a special drone foundation frame or place a shallow frame into a standard brood box and hope the bees fill in the empty space below the bottom bar with drone cells. A normal mite in a drone cell can reproduce 3 daughters, as opposed to 1 in a worker cell. If we harvest the capped drone cells, before they emerge as adults, we knock down that mite number as it is growing. Be sure to take the drones out while in capped stage before the adults emerge. You can feed the drone brood to your chickens. Is this cruel? No, Dewey said: your colony doesn't need that many drones. Dewey compared those who did/didn't practice drone brood removal, and there was no significant difference nationwide, but when he compared northern v. southern states, northern respondents practicing drone brood removal reported 10 to 33% reduction in loss, so it may have helped.

Medicating bees: Did you medicate or treat your hives in 2014? 61% of respondents did not treat with chemical controls, 39% did: those who didn't treat had significantly more colony losses. These data are not broken down by north v. south. Dewey said that he is not here to promote chemicals: they are tools, and you can choose to use them or not. Consider all aspects of positives and negatives: they all have both.

See the PDF slide listing the wide variety of treatments available: formic acid (Mite-Away Quick Strips, or MAQS), oxalic acid, amitraz, essential oil [Apiguard or Apilife-var]. For essential oils, those who used Apiguard or Apilife Var reported 26 to 31% fewer overwintering

losses in 4 consecutive survey years. Honey-B-Healthy, Dewey noted, doesn't control mites, and there was no significant difference in losses for those who did v. did not use it. There is a difference between a food, a medicine, and a poison: the difference is dosage. In HBH, there is not enough killing agent to control mites; however, it does have other uses, such as helping bees accept sugar syrup, and helping unite swarms. Formic acid (Mite-Away Quick Strips, or MAQS): respondents using it reported 16 to 31 % fewer losses. Those using Hopguard 2 reported 10% fewer losses in one survey year, 2013-14 (it is a relatively new product). Oxalic acid: respondents reported 37 to 41 % fewer losses. Apivar [amitrax] users reported 35 to 47% fewer overwintering losses, but it may affect drone sperm and queen rearing.

Queen related colony loss: Dewey reported that while we know this is happening, we are not yet getting at what is causing these losses. 45% of respondents re-queened, or their colonies did. 36% did not, and 19% said their colonies did not requeen that they were aware of. Dewey drew an analogy with using a back brace for a bad back, when what you need to do is strengthen your back: it's the same with bees. Queens are a key to this. There are 3 breeders working on breeding bees for our habitat, including WSU and the USDA lab in Louisiana. Russian bees have better ability to resist mites. WSU's program with imported semen is yielding bees better in hygienic behavior to remove mites. Mixing local stock with hygienic stock seems to be working.

Norm asked if Dewey thinks that feral bees are "cesspools of disease," as some argue, or if he thinks they help to strengthen commercial bees? Dewey says that it is hard to survive in wild, so the betting is that the heavy selection pressure on ferals makes them tougher survivors. One speculation is that ferals have fewer mites and don't die of mite effects as much as bees in standard apiaries.

Bee counted: bee informed! Dewey concluded by asking us to make a mental note to participate in the survey next year!



Above left, LCBA bee on the front of a t-shirt; middle, full size LCBA logo; right, LCBA patch on a jacket.

June Business Meeting Notes

Treasurer's Report: Treasurer Rick Battin reported that LCBA's checking account balance is \$4,911.31, and the Youth Scholarship Program fund is \$755.56. Rick also reported that LCBA's patches and iron-on transfers – see above -- are now available for your bee suit, t-shirt, windbreaker, or whatever you choose. You can buy patches directly from Rick at our meetings for \$4. For the iron-on transfers, you buy a sheet of all 3 transfers from Rick for \$9: the sheet has the small bee, the small logo, & the large logo. Rick then emails Alderson's, and you bring your clothing item to their shop so they can use their special press to iron it on for you. They can also iron-on your patch. Please pay at an LCBA meeting first so that Rick can contact

Aldersons, and they will have a record of your purchase and not be confused when you bring in your garment. FYI, Alderson's charges and additional \$3.50 to iron transfers or patches onto a garment you bring, and \$2.50 for a garment you buy from them.

Mentor Program Update: Mentorship Coordinator Martin Stenzig reported that all but two requests for mentors have been met, and he is working on those. If you're an LCBA member who would like a mentor, please contact Martin at martin@stenzig.com and he'll organize it! Also, personalities being what they are, every now and then someone would like a different mentor, and that's ok: just contact Martin.

Martin and Marcelle have also been leading colony removals as educational workshops: attached to this newsletter mailing is a file of photos & commentary from "Team Mossyrock." If you'd like to be involved, email Martin (see above).

Southwest Washington Fair: Community Outreach Coordinator Dan Maughan announced details about the fair – this year, Aug 18 – 23, the 3rd week – and passed around a sign up sheet for booth volunteers and those willing to loan gear. For details about LCBA at the Fair and about our two honey contests, please see the separate sections earlier in this newsletter!

Free Queenline Jars for Members Entering Honey Contest: Education Coordinator Peter Glover announced that we have Queenline jars free for LCBA members who want to enter honey in the Fair honey contest. These jars really facilitate judging because they are handled by the ribbing on their sides, leaving the fronts clean & clear for viewing the color & cloudiness of the honey. (We'll have the jars available at the potluck too, so if you missed the June meeting, no worries.)

Judging for crystallization; Club refractometer: Peter also noted that this year, we ARE judging for crystallization, which, as Bob Smith noted at our June 2013 meeting, is a standard for honey contests nationally. Toward this end, the board is interested in buying an accurate refractometer, one that compensates for temperature. The club can use the refractometer not only for the honey judging, but also at our honey extraction workshop, in our classes, during the People's Choice contest at the fair, and at our public talks to help educate folks about the difference between raw honey and the supermarket bear. . . Norm polled those present, and support for a more accurate refractometer was unanimous.

LCBA's 7th Annual Summer Potluck, Saturday, July 11, 4 to 8 p.m.: Dan has organized with the City of Chehalis to hold our summer potluck at Lintott Alexander Park again; the City waived the insurance for us again. Details about what to bring & about our drawing to raise funds for our 2016 Youth Scholarship program are in our Upcoming Events section, above. We're looking forward to fun, food, fellowship, & talking bees!

PLANTING FOR POLLINATORS: Susanne presented our website's refurbished "Planting for Bees" page, which has lots of resources for anyone interested in supporting pollinators in their gardens. Visit http://lewiscountybeekeepers.org/plant_for_bees - there are links to lists of plants that grow well in our region and are excellent pollinator forage . . . tips on how to plant effectively . . . lists of common garden products that contain neonicotinoids . . . lists of seeds that are neonic-free . . . and more.



Above left, foraging honey bee – photo by Brian Mittge. Right, Burpee’s Bee Garden seeds – free of neonicotinoids and GM materials – we distributed 500 seed packets donated by the National Park Service at our June meeting, and we’ll have another 500 to give away at the Southwest Washington Fair.

Cecelia Boulais’ information - & free parsnips: Master Gardener Cecelia Boulais brought handouts to share that describe excellent plants for pollinators – her handout is linked on LCBA’s site, above. Cecelia also shared some beautiful parsnips for people to take home free – organic parsnips that over-wintered & will sprout. Below are her photos, and here are more parsnip details: “I sent the pix to show how big the parsnip plants will grow. The parsnips in the pix overwintered in the ground--were not dug--and are blooming now. The parsnip roots we brought to share were dug and stored in cooler. If planted now, they will grow approximately the same height, and bloom later this summer/fall.”



Above left, a bee on a parsnip plant at Cecelia Boulais’ farm in Rochester; right, Cecelia’s interns & beekeeping helpers, Rachel & Alex, stand in front of flowering parsnip for scale. Rachel & Alex have been enthusiastic attendees at LCBA’s hive inspection workshops this year.

BEES IN THE NEWS

There's been a LOT of news about bees recently! Because this newsletter is already long, please check our Facebook page or our website for recent developments; bee news stories will be a central feature in our August newsletter edition.

Beekeepers officially recognized as farmers for tax purposes in Washington state: Our WSBA Area 2 representative, Franclyn Heinecke, writes: "Great news! After three years of working with the legislature on this issue, Gov. Inslee has signed into law 6057. Part XI of that bill is what used to be SB 5017, designating beekeepers as farmers and their products as agricultural products. This is a significant move forward to have beekeepers finally recognized as farmers for tax purposes in WA State. It brings us to the table with other agricultural entities and interests -- farmers, orchardist, etc.

The legislative committee of the Washington State Beekeepers Association worked to get this law passed: Mark Emrich, Tim Hiatt, Franclyn Heinecke, Krista Conner, Paul Hosticka, and Laurie Pyne, and many local club members helped with legislative outreach and the WSBA Legislative Day held earlier this spring. Beekeepers Eric Olson and Paul Lundy first introduced this legislation several years ago, and Eric worked with Senator Honeyford to have it reintroduced this year." For details about what was passed into law, visit:

<http://apps.leg.wa.gov/billinfo/summary.aspx?bill=6057&year=2015>

"What Bee-killing Mites Can Teach Us About Parasite Evolution," 2 July 2015, *American Bee Journal*: A new study has found that manipulating how a key protein works in Varroa mites might inhibit their infestation of honey bee brood. For details, visit: <http://us1.campaign-archive1.com/?u=5fd2b1aa990e63193af2a573d&id=7d98b080b6&e=e9ff21e0bb>



Above, "Jurassic Bee" ~ by Cody Warren

ANNOUNCEMENTS

Local Honey is Available Now: Visit our website, click on Honey, then on “Buy Local Honey.” If you’re an LCBA member who is selling your honey, let Susanne know to be listed on the site.

Work Opportunity: Centralia area beekeeper Tim Weible needs someone with stamina to help move bee colonies up to the fireweed over the coming weekends (need to have your own protective gear). For information about compensation and hours, please call 360 791 3910.

2015 Vita International Honey Bee & Beekeeping Photo Competition: Entrants may submit up to 4 photos in Vita’s competition. Winners will be featured in the 2016 Vita (Europe) Ltd Calendar (winners receive a free copy). Winners receive both a cash prize and Vita anti-Varroa products. Also, best “entries will be added to the Vita Gallery, a free online resource of more than 600 honey bee-related photos which is used by beekeeping lecturers and associations across the globe.” Submission deadline: October 18. For details on how to enter, visit: <http://www.vita-europe.com/news/2015-vita-international-honeybee-and-beekeeping-photo-competition/> .

CNN March 12 Special Program on Distressed Bees & Beekeepers: A transcript (sorry, just text, no film footage) of this program is online at: <http://transcripts.cnn.com/TRANSCRIPTS/1503/12/inm.01.html>. The documentary itself is under copyright; if it becomes publicly available, we’ll announce it in this newsletter ☺

Got More Bees Than Forage? Want to Place Some Bees on a Space with Good Forage? Three farms – one in Thurston County just north of the Lewis County line, one in Centralia, and one in Mossyrock – would like to host bees for pollination. Here are the details – please contact Laurie, Amanda and/or Stephanie if you are interested.

From Laurie Martin Vliet, S.W. Thurston County: “We live on Michigan Hill Rd (just north of Lewis Co. Line) and have 22 acres of pasture land and orchard. This is located in S.W. Thurston Co. I have no knowledge of bee keeping. We do not use pesticides and do have water sources such as man made ponds and water troughs for our cows and horses. If interested in having hives placed on our property contact: Laurie, 360-623-4270, or Doug, 360-561-5844.”

From Amanda Baldwin in Centralia: If anyone is looking for property to house some bees on, we have 40 acres, with scattered trees, fruit trees, and blackberry brambles of course :) Please contact: baldwin.amanda.j@gmail.com .

From Stephanie Grose in Mossyrock: I would love to find some honey bees or mason bees for this season. I have a small 5 acre farm in Mossyrock, Washington. Please contact: stephaniegrose@tds.net .

July Western Apicultural Society Newsletters: 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.

July WSBA Newsletters: Pick up your copy online at www.wasba.org: click on "Newsletters."

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

~~ Susanne Weil, LCBA Secretary (Susanne.beekeeper@gmail.com; 360 880 8130)