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April-May 2015 LCBA Newsletter

In This Edition:

- **Upcoming Events: Speakers & Workshops (2 - 6)**
- **LCBA Package & Nuc Pickups / Missed Bee Orders, But Still Want Bees / Queens? Options Outlined (6)**
- **SHB 1654, Supporting Better Bee Forage, Is Before the WA State Senate (7)**
- **Youth Scholarship Program 2015: Our LCBA Student's Progress (8 - 9)**
- **Spring Youth Fair - LCBA's Exhibit & Volunteers (9 - 10)**
- **New LCBA Board Officers (10 - 11)**
- **Notes from our April 8 Monthly Meeting (12 - 18)**
 - **Swarm Capture Tools**
 - **Hiving Bees in Top Bar Hives**
 - **Testing & Treating Bees for Varroa Mites - some less toxic approaches**
 - **Business Meeting Notes**
- **Notes from our March 11 Monthly Meeting (18 - 23):**
 - **Building Nuc Boxes**
 - **Using In-Hive Thermometers To Monitor Colony Health**
 - **Discussion: Early Spring Management Issues / Beekeeping Q&A**
 - **Business Meeting Notes**
- **Want Inexpensive Bamboo Skewers for Colony Removal Season? Kimo Thielges has options for you.... (24)**
- **Bee Song ~ by Rich Harned (25)**
- **Bees in the News will be back in June ☺**
- **Announcements (26)**

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:

Wednesday, May 13: Monthly Meeting: The Chemistry of Honey, Pollen, & Wax

Speaker: WSBA Master Beekeeper Louis Matej

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: How do bees produce needed energy & heat from sugars in honey? What sugar content do they get from the nectars they gather? We know that bees get protein from pollen – but how do they use that protein? And how about beeswax – what chemical & physical properties make it so special? As a hobby beekeeper and chemist (BS in Clinical Chemistry), Louis has always been interested in not just what we see on the outside, but what goes on inside the bees themselves. Our goal: to understand more about what bees need to survive & how they use the products they produce & collect. *Also: business meeting & beekeeping Q&A.*



Pollen: Alexander Wild Photography

Saturday, May 16: Puget Sound Beekeepers – Queen Rearing Class

When: 1 to 3 p.m.

Where: The Greenhouse behind the Graham Visitor Center, Washington Park Arboretum

For registration (\$25) & directions, visit:

<https://www.pugetsoundbees.org/events/#!event/2015/5/16/hive-splitting-queen-rearing>

What: PSBA trustee Kathy Cox will cover several ways to split hives to increase colony numbers, prevent swarming and create brood breaks which helps control mites. Use these techniques to make new queens and learn what's needed to support them. This class is for beginners as well as experienced beekeepers. Mock splitting in classroom setting.

Saturday, May 30: Hive Inspection Workshop ~ Chehalis ~ *Weather Dependent*

Topics: Management to Prevent Swarms; Examining Brood Patterns ~ when should you re-queen? Discussion: Planting Bee Forage. Beekeeping Q&A.

When: 1 to 3 p.m. with Q&A to follow

What: Get hands-on in a hive with LCBA mentors & practice inspection & management techniques. Please bring protective gear. Children are welcome (please be sure they have protective gear, too)! LCBA workshops are free & open to the public; donations to support our educational programs are appreciated :) **For Directions: RSVP to susanne.beekeeper@gmail.com**



Photos from our April 11 Spring Hive Inspection Workshop in Adna (Rick Battin)

About 30 beekeepers attended this workshop, led by 8 LCBA Mentors – everyone was able to get hands-on in a hive. Many thanks to our host, Community Outreach Coordinator Dan Maughan.

Dan demonstrated a split - & then had to “split” in his truck to chase a swarm down the road, called in by a neighbor! A bunch of the workshopppers went along & a good time was had by all (including, we hope, the re-homed bees).

Also on May 30: Puget Sound Beekeepers’ Association - Beekeeper Field Day

When: 9:00 - 4:00 p.m. Seattle, WA (check in at 8:30 a.m.)

Where: Washington Arboretum, 2300 Arboretum Drive E, Seattle, 98112

Topics: “*Keeping the Hive Alive: Sustainable Beekeeping*”; “*Honey Bee Health*”
Featured Presenter: Peter Loring Borst, 40+ year beekeeper, has served as Apiary inspector for New York State & Senior Apiarist at Cornell’s Dyce Lab for Honey Bee Research. Additional speakers in the afternoon.

Registration: \$50/person or \$70/household of 2; includes lunch. Space is limited. *For registration forms & more information, visit: <http://www.pugetsoundbees.org/psba-may-learning-events/>*

Wednesday, June 10: Monthly Meeting: Pacific Northwest Bee Loss Surveys & Management Practices – What Do Results Say about How We Can Help Our Bees Survive?

Speaker: Dr. Dewey Caron

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: Dewey is back to cover past winter loss results for the PNW, Washington State, & Lewis County, emphasizing what we can do for the rest of the season to help our bees. If data turn out to be typical of past years, we can expect about 30% overwinter losses. Many will remember Dewey's great talk last September – we can expect a lively discussion of how our bees have fared and what management practices seem most helpful. *Also: business meeting & beekeeping Q&A.*



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.

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 99164-6182



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.

Saturday, July 11: LCBA's 7th Annual Summer Potluck (*There is no meeting on Weds., July 8 – our summer potluck takes its place.*)

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

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. There will be a wood burning stove with 4 cooking areas, 4 electrical outlets, an outdoor faucet, garbage cans with liners.

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

Topic: Fun! No speaker, though we'll have a drawing to raise funds for our 2016 Youth Scholarship Program. Please bring items for our drawing if you feel so moved. The drawing will be followed by a short business meeting.



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.

Also on 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.



Missed LCBA Bee Orders, But Still Want To Order Bees?

Here Are Some Options:

Package Bee Options: Some suppliers are still taking bee orders, though you would have to contact them quickly. Beeline in Rochester can order Carniolan packages for \$110 per 3 pound package – Carniolans with marked queens; Italians can be arranged. Tim Weible at the Honey Hut / Pioneer West is doing orders (check with Tim for types & prices). Finally, Ruhl's down in Portland is an option, too, particularly for queen replacements. For contact information for all three of these vendors, please check our website:

http://www.lewiscountybeekeepers.org/beekeeping_supplies .



Photo: Amazing Gallery of Nature

SHB 1654

~ Supporting Better Bee Forage ~ Is Before the WA State Senate Ways & Means Committee

Our Area 2 WSBA Representative, Franclyn Heinecke, reports some – potentially – great news for bees in Olympia - SHB 1654, if it passes, will develop “pilot projects to replace noxious weeds with native plants that provide good bee forage. The “forage” bill passed in the House and the Senate Natural Resources Committee.” However, it has been languishing in the Senate Ways and Means Committee since March. But all is not lost - senators need to hear from beekeepers if they support the passage of this bill, so if you contact your state senator, you can help make a difference for bees.

Franclyn adds, “If you’d like to contact your state legislator to urge him or her to support passage of SHB 1654, here’s how:

- Go to leg.wa.gov: from the left sidebar, click on “Bill Information.”
- On the bill page, put the bill number – 1654 – in the “search by” box and click on search.
- On the page with the bill information, there is a green “Comment on this bill” box close to the top, next to the bill number. Click on that box.
- Add your name and address to verify your legislative district.
- Comment on the bill – indicating that you support it if you do.
- Submit the form. You can choose to send your comment to all three of your legislators if you wish. Area 2 State Senators: John Braun (20th, Centralia, Chehalis); Karen Fraser (22nd, Olympia); Randi Becker (2nd, Yelm, Eatonville, Mt. Rainier area); Brian Hatfield (19th, Aberdeen, Longview)

LCBA Youth Scholarship Program: Our 2015 Student's Progress

Meet Lewis County Beekeepers' Association's 2015 Youth in Beekeeping Scholarship student: Jana Girt of Onalaska High School. Jana is a Future Farmer of America, planning to make beekeeping one of her Supervised Agricultural Experience projects. Along with FFA, Jana's participates in Onalaska HS's Knowledge Bowl & Science Club, plays soccer, runs track, does cheerleading, & is a class officer. She's a busy worker bee herself!



Above, left, Jana assembling her medium super boxes; right, Jana holds up a thickly-drawn frame during her first hive inspection.

In her application, Jana wrote, “Bees provide a symbiotic relationship between plants and themselves . . . this is a fascinating exchange of mutual benefit that I would absolutely love to learn more about.” She’s well on her way. Jana & her mom, Janelle Girt, assembled her hive boxes & frames early in April, preparing for the arrival of her Italian package bees. They are a great mother-daughter team. LCBA's 2015 Youth Scholarship mentors, Susanne Weil & Peter Glover, are helping coach, but Jana is a natural. She learned to wield mallet and staple gun as she assembled boxes so deftly that Peter is thinking he might have to hire her as shop help. . . .

Jana did her first hive inspection April 19 and showed a deft touch there, as well: her calm demeanor is helping her work her bees gently and effectively. She spotted the queen herself on frame three. Jana decided to keep her bees in medium super boxes (easier for a petite person to lift) and added a second medium after just one week. Her Italians are building up beautifully – on May 10, she added the 3rd medium brood box, as her bees had filled 7 frames of their 2nd box. Jana and Janelle are having fun keeping bees together (and other members of the Girt clan have been spotted near the hive, as well. . . .). For more photos, see next page.

Last year's Youth Scholarship student, Joevanie Montalvo, has over-wintered his bees successfully - and now his sisters have taken WSBA's apprentice beekeeping course and are starting with their own bee colonies. We're very excited that these families new to beekeeping are enjoying the craft so much.

LCBA thanks Beeline of Rochester, who bid to equip our 2014 and 2015 Youth Scholarship students and offered a discount. The club pays for our students' first year beekeeping supplies and bees. Thanks to all of you whose donated items at our drawings and whose ticket purchases have helped to fund this program!



Above left, Peter Glover coaches Jana as she assembles her hive boxes; right, mom Janelle, left, watches as Jana inspects her bees, May 10.

LBCA's Exhibit at the Spring Youth Fair, May 2-3



Above, LCBA's observation hive was once again a magnet for kids of all ages.

Below, volunteer Gordon Bellevue, left, gets into the spirit of things at the May 2-3 Spring Youth Fair with a fetching bee face painting; right, Community Outreach Coordinator Dan Maughan did a great job organizing our exhibit and marshalling our volunteers.



This was LCBA's second time at the Spring Youth Fair - at the Southwest Washington Fairgrounds, May 2-3. About a dozen LCBA volunteers turned out to talk to kids and parents about bees and beekeeping all through the beautiful weekend. Once again, our observation hive was the star of the show, drawing many visitors to seek the queen, watch baby bees hatch out, and just generally observe honey bee behavior.

We had a fun exhibit with hive box demos, trifolds, free recipe cards from the National Honey Board, and more. Many thanks to Sharette Giese for loaning interactive bee games: her terrific trifold that lets students Velcro names of bee parts onto the appropriate part of the bee . . . the "bee straw game" . . . and her "Gifts from the Hive" display of honey, pollen, and royal jelly products.

Thanks most of all to Dan Maughan, LCBA's Community Outreach Coordinator, for organizing! Our volunteers did a great job helping the public connect to bees: thanks to Terrie & Michaela Phillips, Ed Odell, Chuck Ament, Gottfried Fritz, Gordon Bellevue, Mel Grigorich, Jovanie Montalvo, Peter Glover, Dan Maughan, and Susanne Weil for staffing our booth.

LCBA's New Board Officers

As President Norm Switzler informed our membership in an email earlier this month, with regret, LCBA's board accepted the resignations of Vice President Dave Gaston, Education Coordinator Tomme Trikosko, and Mentorship Coordinator Kent Yates. LCBA appreciates their many contributions. Dave spoke to our group about his adventures in top bar hive beekeeping and hive-building, as well as queen rearing, and hosted LCBA for several workshops at his farm in Littlerock. Tomme was instrumental in launching our Youth Scholarship Program as well as revising our bylaws as we prepare to seek 501c3 status. Finally, Kent shared his knowledge about bees and his many innovative devices he engineered for keeping his bees in many monthly meeting talks and workshops. All three will be missed, and we wish them well in their future beekeeping adventures.

LCBA has grown from an association of about 40 members in 2008 to almost 150 memberships, many couples or families; our mailing list is 550+. As we've grown, growing pains have been inevitable, and the board is planning to keep our focus on talks and workshops that support beekeepers at all levels. Toward this end, the board accepted Norm's appointments to fill board positions vacated: Kevin Reichert will serve as our Vice President, serving the remainder of Dave's term (through December 2016): many members enjoyed Kevin's presentation about his moisture control methods for over-wintering bees last September.

Martin Stenzig has taken on the post of Mentorship Coordinator, and is working to update our mentor/mentee linkages: Martin presented his hive box design strategies, as well as his swarm capture vacuum box, at last November's meeting. Marcelle Stenzig has taken on the club Facebook page – not a board position, but we appreciate her creativity and willingness to volunteer!

Finally, Peter Glover has accepted the position of Interim Education Coordinator. Peter is a Journeyman beekeeper and will facilitate the Journeyman study group in addition to coordinating our apprentice beekeeping classes. Peter is one of LCBA's original members and wrote our first bylaws; he has served on LCBA's board as its first "past president," 2008-2011, and again 2013-15. Please welcome our new board members.



Above left, newly appointed LCBA Vice President Kevin Reichert with his prize-winning honey from last summer's Southwest Washington Fair – People's Choice Honey Tasting contest. Right, Mentorship Coordinator Martin Stenzig and Marcelle Stenzig, who is now coordinating LCBA's Facebook page. Below, Interim Education Coordinator Peter Glover:



LCBA MONTHLY MEETING NOTES: APRIL 8TH

How Many Ways Can You Capture Swarms? President Norm Switzler and Vice President Dave Gaston noted that swarm season is upon us. The “swarming window” is usually between 10 a.m. and 2 p.m., though this can vary. Once bees have swarmed, if they are still balled up around 3 or 4 pm, they will be unlikely to go anywhere: they will snug up overnight, and you can get them first thing in the morning. In response to a question about how to know where the swarm queen is and if you’ve got her, Norm said that if she’s not in the box, the bees will leave.

Homemade tools: If you want to capture a swarm, you need something to put them in. Norm and Dave displayed the tools they use. When going more low-tech, both Norm and Dave use rods that can extend the reach of bags that can scoop up the bees if they are high up and trickier to get to (see photos below). Norm’s extension pole is the kind used to scrub the upper deck of your house – he uses duct tape to attach netting to this pole. Dave clips a cheap paint strainer onto a long pole.

Bee Vacuums: Both Norm and Dave use “bee vacuums” to get bees out of those hard-to-reach places. Norm emphasized that the bees will survive vacuuming better if the machine is equipped with a smooth rather than a corrugated hose, as the smooth hose causes less wear and tear on the bees as they are sucked in. Dave had a homemade bee vac and didn’t like it, so he picked up a bucket with a mesh cylinder inside: since bees will regurgitate nectar, this can kill them inside a vacuum, so the mesh helps. The vacuum can plug into the cigarette light, so he can run it out of his truck. The price range for Dave’s vac-plus-bucket (originally \$85) is now over \$100 from Brushy Mountain. Dave also showed how to adjust the vacuum flow so you don’t suck the bees in too hard. Finally, Norm and Dave demonstrated a nuc box that the vacuum hose fits into. Norm noted that Kevin Reichert has one with a 20 foot lead-in hose: he can go up a ladder and get bees from high places in a gentle way. You can see through the window inside and check they are OK and still flying. Dave noted on hot days he puts a screen in place of entrance restrictor on his nuc box and staples it on for ventilation.



Norm and Dave display swarm capture devices.

Bait boxes for swarm captures: For bait boxes, use bee-scented material, comb, etc. Place the hive in a dry sheltered spot – though bees, as we know, may bypass a lovely, inviting bait box and go into a knothole in a wall. Some beekeepers use lemon balm oil to help lure bees to the bait box. Dave noted he has used the lemongrass oil, just about 8 drops on paper towel in partly opened sandwich bag: it is cheap and has worked for him.

Susanne asked Gordon Bellevue about his “magic swarm capture box” that lured many swarms last year. In 2013, Gordon made the boxes about the size of a nuc, 6 frames wide, then put in 4 frames with wax and left 3 inches below; he put queen attractants in and got nothing. Last year, though, he just put in frames with wax - and bees moved in again and again. They also moved into his truck, so it might be the location: he’s between Winlock and Napavine, and that’s been the hot spot. Norm was glad that Gordon had mentioned queen pheromones, because they are expensive and often don’t work. Gordon noted he left the queen attractants in, but is not sure that they had anything to do with his good fortune last year.

Dave noted he takes a replacement box when he goes to the undisclosed location of his special cedar tree in Shelton so that he can take the bait box home if it is full of bees and install them without losing the chance for another swarm. Norm said that a bait box is best placed about 8 feet up off the ground. Can just bungee box to tree and that is an easy take down. Dave noted often they will follow a fence-line: the bees will be likely to come across a pasture and go into trees since they are looking for a structure, for a home. Remember that the queen in a swarm has not flown since she was mated: it is hard for her to fly since she is weighted for eggs, and she needs a warm day with updrafts. You will see ground swarms if the queen has dropped to the ground, but they won’t nest in the ground.



Above left, the Mail Box Girls, hived by Kevin Reichert in April (photo, Renee Baldwin); right, a swarm beards the baby Yard Bird, Saturday May 9 (photo by Kathleen Hamm Ament; bees hived by Chuck Ament & Kevin Reichert)

Bees in odd places: Mark Stewart noted that once he got a swarm out of a water meter box: he had to lift the whole casing - he then lifted up the top and handed the bees out into his box, and they thrived. Norm commented that usually you get a lot of room when you are removing bees: one time in Chehalis, the police cordoned off the whole street.

Susanne was asked to tell the story of her “College Girls,” who swarmed into a tree on campus the day before graduation last year. The building and ground staff gave her a grading

break, asking her to remove the bees, and since she had all her gear in the trunk of her car, she scampered up a ladder to get them (with an audience of faculty & students cheering her on). However, they were up so high that she wasn't sure she had the queen, so left her nuc box on the ground with the top slightly ajar, then went back two hours later to check. Sure enough, the bees had gone back up into the tree, so Susanne called on a taller authority, Kevin Reichert, who could reach higher and got most of the bees; they went back a day later with Grant Inmon and the vacuum and got the stragglers. Dave noted that if you spot multiple clumps of bees in a tree, get both clumps! The College Girls now reside in Onalaska, & Susanne is planning to shift them into blue & gold boxes with the Centralia College tree stenciled on so they never forget where they came from. . . .

Have your gear ready: Norm noted how important it is to have your gear ready, including a nuc box. Gary Stelzner noted that when using cardboard nuc boxes, be a little careful, since they can chew their way out of the cardboard or seams on the boxes. You may want to reinforce holes with duct tape so that you are not unnerved by bees getting out and all over inside of your car. In transport, be sure that the box is supported on both sides so that it doesn't tip if bees are clustered all on one side. Steve Howard said he's taken a 5 gallon bucket, cut the lid out, and put a mesh screen on top for ventilation: when he puts the bucket under a swarm he just sweeps them in - it is easy and well ventilated.

A box with frames helps: It's important to have frames in a box if you can: the problem with empty boxes is that the sides are slick, so the bees may be piled on top of each other, whereas frames give places to hold onto. Norm says he has used a 35 pound dog food sack: if it is just for transport, it should be ok. Kevin Phillips noted that a swarm installed on his property, so he made the mistake of putting them into 2 boxes: he thought he was being nice, giving them a mansion, but a swarm thrives better in one snug box.

How to Hive Package Bees in Top Bar Hives

Hiving swarms or packages in a top bar hive: Install bees in the space between the bars. You can set the package of bees directly into the top bar box: take the staples out of the mesh of package, or just pull out the syrup can. However, if there are no bars on the top bar, the bees will pour out of the hive, so it's important to keep them as contained as possible.



Left, cross-comb; right, using hair clips to re-affix comb to a top bar (photos, Dave Gaston)

Dave explained that after installing the bees, you must check every few days to prevent cross-combing (see photo), as the bees do not have the guide of foundation to keep the runs of comb straight. If you have smooth combs, you can use them to “train” the bees. (This would also work for foundationless beekeeping in a Langstroth hive, in which you insert frames but do not put foundation in them. The risk is that the bees will build bulging comb and cross-comb.) Side to side tilt is critical to avoid on a top bar hive, or a Langstroth, for that matter. Front to back doesn’t matter because comb runs will follow the bar front to back, but if a bar or the hive itself is on a side tilt, the bees will build down from the top bar to the hive bottom on a slant. Tim Weible noted that the cross combing can be rectified by checkerboarding.

Dave commented that if you have to straighten the comb, you can cut it off and reattach it. If you are too late and there is brood... Dave suggests leaving it alone and fixing it next year. You can then reverse the bars to get it back on track. Once you have straight comb, add an empty bar between the fully built straight ones. When there is a strong nectar flow, add more bars. When there is a dearth, cut back the number of bars. Dave recommends Les Crowder’s *Top Bar Beekeeping* as a resource.

Spring management with top bar hives: Dave noted that the first thing you do is open up the brood nest. Then, take two bars of bee bread or honey that is at the end and put them in the #1 and #2 position. At the end of the brood nest, put a bar of empty comb, and then an empty bar for them to build new comb on.

Top Bar Hive Dimensions: Dave also shared the dimensions he uses to build his own top bar hives. He makes 28 Bars- 17.5 X 1 3/8. For the box, inside measurements are 16” across the top, and 6.5” across the bottom; the inside length is 42”. The depth from the bottom to bottom of the top bars is 11”. Finally, Dave builds 2 follower boards that fit snug inside: these are important to contain the brood chamber and separate it from any honey bars you wish to harvest.



Above left, sugar dusting to knock down mites (don’t dust over the brood chamber, though – see below); right, sugar shake to sample bees for mites.

Testing Newly-Hived Package Bees for Varroa Mites

Secretary Susanne Weil discussed the opportunities that a newly-hived package of bees offers us in diagnosis and, possibly, treatment of varroa mites. Since the package is broodless, there are no drone larvae for the mites to infest: this broodless window offers an opportunity to knock down the phoretic (“hitchhiker”) mites on the adult bees. First, you have to find out if the

package actually has mites, and the easiest way to do this is to insert a “sticky board” beneath the screened bottom board. Many bottom boards come with slider boards; if not, these can be bought at most bee supply stores, or you can cut a piece of white plastic to fit. Spray it with cooking oil. As the mites reach the end of their lifespan, they will drop off the bees and fall through the screened bottom board. You can insert the board for 24 to 48 hours; after examining it, an ice scraper will clean off the hive debris nicely.



Above, varroa mites amid hive debris on a sticky board; right, scraping off debris (photos, scientificbeekeeping.com)

How many mites mean trouble? This has been debated and views have changed over time; also, different numbers mean different things at different seasons. If you are testing a package of bees, which is not yet an established colony with comb and brood, if you have the equivalent of one mite per hour, you may wish to consider treatment options. One non-toxic method is to dust the frames with powdered sugar, which makes the bees slick and stimulates hygienic grooming behavior, so mites will drop off. You may succeed in knocking down many of the package bees’ mites this way. Be careful, though, about using sugar dusting in an established colony: it is not good for open larvae for sugar to get into their cell and gum up the nutrients the nurse bees have established.

Mite loads in an established colony: the classic view is that if you have 50 mites on a board after 24 hours, that means roughly 2500 mites in the colony, and probably will want to do something. Later in the season – midsummer to early fall – if you have one mite drop per hour, you may want to consider treating because the bees’ reproduction is slowing down at this point, and mites can overtake the colony.

What to do if your bees have a significant mite load? Here beekeeping philosophy comes into play. If you wish to be an organic beekeeper, you may want to use sugar dusting, or Hop Guard II, a beta hop acid infused on strips of cardboard that hang over frames in the brood chamber. These are treatments that only address the adult, “hitchhiker” mites: mites will still be hatching out with baby bees. To penetrate brood requires fume treatments – such as Mite-Away Quick Strips (MAQS) that can be toxic to the bees and potentially damaging to the queen, though many report that they do work. A great source for information about Varroa treatment option is Randy Oliver’s website, scientificbeekeeping.com; April’s *Bee Culture* also has a feature on Varroa treatments.

Susanne commented that some commercial beekeepers treat as a matter of course, assuming that their bees have mites, but that we hobbyists may not want to treat our bees if it isn't necessary: test first to see if there is a problem, then consider how to address it. Norm and Rick Battin reinforced this, noting the risk of creating resistance in the mites to treatment, effectively breeding a stronger mite. Others noted the importance of rotating treatment types for this reason.

To see videos that demonstrate the sugar dusting treatment and the "sugar shake" method for sampling live bees for mites – preferable to many than the alcohol washes which kill the test bees – visit: <https://www.youtube.com/watch?v=G3LwVwkzjyA> (Sugar Dusting Video) and https://www.youtube.com/watch?v=ZvWfGMvy_zs (Sugar Shake Video).

April 8th LCBA Business Meeting:

Treasurer's report: Rick Battin reported that LCBA has \$855.50 in the Youth Scholarship Fund and \$18,491.61 in our main account, but \$11,908 of that is package / nuc bee payments that will go to Olympia's vendors when bees arrive. LCBA iron-on patches will arrive within a couple of weeks (post meeting note: these will be available at our June meeting, since Rick will be at a forestry stewardship training on May 13). Rick is working out the pricing with Alderson's.

Mentor Program: *Post-meeting note:* since Kent Yates stepped down as Mentorship Coordinator, if you would like a mentor, please contact our new coordinator, Martin Stenzig (martin@stenzig.com). We will do our best to match you with someone in your geographical area; we do not put the mentors' contact information up on the website.

Kent spoke to members about what the mentor program does and doesn't do. Some beekeepers are interested in doing beekeeping for themselves and consult when they need help. Others want to be bee watchers and ask mentors to do things for them. LCBA's mentor program is intended to supplement our members' reading, experience, and, if applicable, classes. Kent noted that we all learned on our own before the mentor program existed. The board asks that members please try to do things on their own - ask when confused, by all means, but in the end, it does not help if mentors come out to manage members' bees for them.

So far, 17 have signed up to be mentors this year and we will likely have about 100 people calling on those 17 people. That adds up to a lot for those mentors with full time jobs. So, the board asks, please be respectful of mentors' time: try to solve issues yourself first, then call if you run into problems and have questions. House calls are for emergencies.

LCBA Mentor training / harassment awareness training, April 10: Kent noted that many people who are good people may not be good at setting boundaries or understanding others. Dan Maughan noted that the April 10 class is for the protection of LCBA volunteers in a litigious world. If you've had harassment training in another job and can document it, you are probably fine. We will have information up on the website for those who have conflicts, but if you come, we can document that you were there. Gordon noted that he's had to have this kind of training before: most organizations and government agencies have their own training and are required to require it. The mentor training will also address beekeeping practices, terminology, etc.

Package Bee, Nuc, & Queen Delivery: update: Italian package bees arrived on April 6; as of this meeting, we still had not heard when nucs or Carniolan packages or queens would arrive.

Swarm & Colony Removals: we passed around a sign-up sheet for volunteers who'd like to help out on carve-outs & swarm calls, though not necessarily lead a removal team.

April 11 Hive Inspection Workshop: April 18 will be our "rain date." (See above for notes on our April 18 workshop.)

2015 Youth Scholarship Program: Susanne gave an update to the membership (for details, see story above).

LCBA MONTHLY MEETING NOTES: March 11TH

Building Nuc Boxes: Community Outreach Coordinator Dan Maughan

For pictures & details of Dan's presentation, see his slideshow, attached to this newsletter's email in PDF; it is also on our website under Monthly Meetings.



Dan is a fan of learning on YouTube, so he went to Michael Bush's site to look at his nuc designs. He sometimes uses 6 and 5/8" mediums, 8 frames to a box, as opposed to deeps, reasoning that there are times when you might want to use a hive that fits the bees. Dan thinks these might not be the best in a good nectar flow, when colonies are expanding, but at other times: see his 2nd slide re: splits, shaken swarms, and small hive boxes. Small colonies can protect and keep a small box dry more easily than they can a large box: they will have less mold, and mold is a recipe for disease. He had 3 colonies in single boxes that made it through the winter, and their boxes looked fine. Dan uses medium boxes for honey supers, but all his brood boxes are deeps.

Standard 5 frame nucs do not fit well on a 10 frame hive. If you put a cloake board or queen excluder or double screen board to separate a nuc from larger colony, those are not a good fits on that nuc box, either. So one suggestion that Dan has seen is to use 2 smaller nucs side by

side. This is illustrated in Dan's slideshow by a photo from Betterbee, which Dan captioned, "all this can be yours for \$81.55 plus shipping and taxes." Dan noted that he's "tight as an Irishman plus bee man plus cattle man, and with all that, I am tight." So Dan decided to make his own boxes. He got cedar logs from a slash pile, free. Dan noted that sawing your own wood can be expensive, but it is fun and a great hobby. He used a friend's planer.

When making these boxes, one thing Dan discovered was that wet wood contracts when drying, and cedar is one of those woods that contracts a lot: there's nothing more discouraging, Dan noted, than cutting everything just like you wanted - and then three weeks later, everything is 3/16 of an inch off. Dan encourages do-it-yourselfers to try to get that wood dry first. He makes them an eighth of an inch taller, the inner cover also a bit wider, and that lets him run them through a planer or saw and cut them down. It's much easier to make a too-big piece right than it is to adjust a piece that's too small. Dan says that while none of his boxes are perfect, they work.

After making the nuc boxes, Dan figured out that he needed lids, inner covers, and bottom boards. He took a Mann Lake hive stand and a screened inner cover, and together, they almost make a bottom board. He asked, what would it take to make a screened bottom board from that? See his slideshow, attached to this newsletter.

Next challenge: stretching hardware cloth to the right tension. Dan's method is laid out in his slideshow: for about every ten feet, he overlaps about half an inch, and it arcs up like a bow and arrow. You can have people sit on ends to hold them in place, and then you staple. He bought wire at Sunbirds, \$2.19 a foot, and it cuts easily with a utility knife.

Dan's next idea was two smaller inner covers, hinged: this lets you lift only half an inner cover at once, so you have fewer bees flying up at you.

For Dan's final results, here is his last slide:



After our meeting, Dan wrote: "I have had several members of LCBA ask me how I make my joint cuts in hive boxes so precise. The truth is I don't consider them precise, and I have a lot of boxes with minor imperfections. That having been stated attached are a few pictures to go along with my power point presentation that display my process.

“I started by purchasing an unassembled box to use as a pattern. I then use the pattern to set the cut height and width for each edge to be cut in a brick of wood blocks. The wood blocks have the outside dimensions of the desired box size to be manufactured. Finally, when all the cuts are made, I freehand router the material out between cuts. The funny thing is a stacked dado blade on a table saw should do the same task, only easier and more precisely. I just don't like using a dado blade on a table saw.”



Using In-Hive Thermometers To Monitor Colony Health: Kent Yates

How can you know if your hives are dead in winter, when you can't crack into the hive and look because of temperature and weather? Kent thought one solution is to know what the temperature is inside the hive. In Illinois, where Kent is from, he used to see that the heat of the bees' winter cluster would melt snow off the top of hive. If the colony is getting carbs and can heat itself, then the colony is alive. If you had a thermometer inside, you would have a better idea. What Kent came up with is installing thermometers on the backs of all his hives; the thermometers have a 12 inch stem, and you can get them on Amazon or eBay. He sought scientific thermometers that people buy for cheese making. That long stem turns out to fall right about in the center of the hive, so by putting that in the hive, right in the center, you end up with the tip of it right near the cluster. He suggests that whatever thermometer you buy, try to get one that has the temperature range you want set in the center of the gauge. You want to be able to read down to zero F and up to around 110 degrees, so you need decent readings in middle of this range. You can put a CD behind your thermometer, so rather than number hives, you know the CD. It just helps keep track of which hive you are dealing with.

Another advantage of using thermometers is that you get a sense of the rhythm of the hive. When something is wrong with your colony, the temperature will change. One thermometer is outside and one is inside, so you know the difference between the ambient outside temperature and the temperature inside the colony, which will be a minimum of 20 degrees above the outside temperature. This is true even in summer, Kent noted. On the day of this talk, the ambient air temperature was 55, but all his hives were at 90 degrees inside. This suggests that the bees are busy are shivering to keep the colony warm. With a hive he had a question about last year, the inside / outside temps were the same, so that was a clue that that

colony had died out. There are ranges in between, and you'll know more if you take readings on regular basis like once a week. Originally, Kent was worried that metal might wick heat out of the hive, or cold in, so he covered a few this year, but it didn't seem to matter to the bees.

To install the thermometer, one thing you have to do is see where the "shoulder" on a frame is. You then drill a hole between 2 frames and put a little half circle cut in those 2 adjacent frames: this will hold the thermometer in place. Kent was asked if bees propolize the thermometer: Kent said that they do, but not enough to stop him from being able to pull the thermometer in and out. You do need a plug to be sure that cold air is not getting into hive.

Another alternative is a digital thermometer: Kent found a KT-98 digital thermometer on eBay for \$8.16. It has a detachable probe that will plug into the thermometer, so he could drill a hole, put the probe inside the box, poke it into a cell, or stick it in propolis, and fasten wherever he wanted, letting the pigtail hang out the end. He could then just go round and do readings by plugging his digital thermometer into the pigtail. You may be off by a couple degrees, but you still get good information. Another advantage of the digital thermometer is that he's had clusters off in the middle, not around his probe, and he didn't want to drill another hole, but with the pigtails, he could easily move the probe

Norm asked about bees moving off to far end of the box: what temperature drop did he see? Kent said that it was significant, just barely above the ambient temperature, but where cluster was, it could be a bit higher. Norm asked, were these bees in distress, and Kent said that they were, less insulated, and farther from their food supplies. Norm asked if it was possible to intercede, put insulation on the outside; Kent said yes, but still issue with food remains. If you could open and move frames over to get them back to center, that would help, but in winter, it's hard to find a day warm enough to do that. Dan asked if he could, with the thermometer, tell which hives had a really good brood cycle going? Kent said yes: those around 70 degrees were fine.

A caution about feeding bees: Kent has one more thing to talk about – he and Gary Stelzner have tried using two chamber feeders with channels down center, so that bees can sit on top of slatted wood rafts. He put syrup in these in the fall, but they got underneath the rafts and ate so much that they could not get out: this killed four of six healthy hives. Kent urges that rather than use a board like this, throw the ladders away, put honey or sugar in a Ziploc instead, and poke holes in the top, as Norm does: the bag will contract as it is emptied, and bees can't get into it.

Discussion: Spring management issues

What should beekeepers be looking for in their colonies now? With the temperature warmer, you should check your colonies if you haven't yet done so. Especially if the temperature is in the low 60s, you can pull frames and see what you have. Is there brood? Are there swarm cells?

Feeding what & when? March is a good time for pollen patties if you want to supplement what your bees are bringing in. Norm noted that though bees are bringing back pollen, how good is it - how much protein percentage this early? We don't know, so pollen patties may be a good idea. For a number of us, Global Patties (can be found via google) have worked well and are the only patties our bees would eat. Dave noted that they sell several levels, and the 15 percent higher protein mix is best for right now. Terrie Phillips asked if anyone made

their own pollen patties: Kevin Reichert said that he tried, but bees didn't like it. Tim Weible said uses a "powder bee pro" and mixes it with stiff sugar water, makes a pattie, and puts that on top of the frames. He uses "the buffet method," saying he'd rather that they had it and didn't eat it than need it and didn't have it.

Feeding sugar syrup? Until the nectar flow is strong, we can help our bees by feeding sugar syrup. You can feed a thicker mix to help them get calories and build up. In spring you want to feed based on colony need: if you have already established comb, as opposed to a new package in which bees are beginning to draw comb, Norm would feed a little heavier on sugar side so they can store it. If a brand new package is being installed, then one to one sugar to water is a good mixture to promote wax glands and buildup. Tomme Trikosko commented that carbohydrates don't stimulate wax production; rather, light levels in open space and absence of wax do. You feed to support that stimulation. Carbs are carbs and one to one can starve them and slow their process of building up. Tim also noted that candy boards are still fine to use. He's also a fan of the 3:1, the stiffer the better.

Probable pesticide poisoning: Kevin Reichert noted that he was checking hives and saw bees coming home laden with pollen, but dying in the entrance, panting, tongues hanging out, unable to get up into the box. He swept them up and sent two jars to WSU's APIS lab. WSU won't test for pesticides, but they did rule out varroa and nosema, and out of the sample of bees, only 20% had tracheal mites. THE USDA lab in Georgia will do test for pesticides for a \$330, fee but Kevin didn't want to pay that: in any case, there is no recourse, since you can't stop anyone from spraying.

Kevin called Steve Sheppard at WSU, who thought, based on the description, that this was very likely pesticide poisoning. If you run into a pesticide issue, you need to change out frames: you should do that every few years. WSU recommends changing foundation every 5 years because of buildup of toxins in the wax; Norm thinks that every three years or so would be better. Norm noted that people are doing spraying for weeds, etc. Steve Howard lives near Kevin, and his bees were ok. Kevin added that if you need to do a nosema or varroa or tracheal test, WSU gets it back within 48 hours, and it is free: you pay only the cost of shipping. The form is on our website (visit resources/links, then "helpful beekeeping sites").

When/how to do splits? Norm commented that March is too early to split hives because there are not enough drones yet: new queens will need to do mating flights, but must have drones to mate with. Maybe in a few more weeks, there will be enough drones. Gottfried Fritz saw drones in a top bar hive in Mossyrock; Norm has seen drones in Adna: there are a few, so the population will explode in a few weeks. Another consideration: colony size v.s. box size. Norm had late colony removals overwinter in a medium super and thinks that the confinement helped them: they were only on 6 skewered medium frames, and if they had overwintered in a big deep box, they might not have been able to keep the cluster warm.

When/how to combine weak colonies or consolidate down to a nuc? Norm said sees this more as fall management, to consolidate weak hives so that there is a large enough cluster to keep the queen warm, and to combine food supplies to create one strong colony. But now, it may be best to feed weak colonies and build them up, as the nectar flow approaches.

If your bees died, what should you do with the equipment? Scrape woodenware clean of everything, all bees and detritus, then use a 50-50 bleach to clean it out, and finally, let it air dry. Some use a propane torch and scorch the woodenware lightly, then scrub it out. Bees will do

their own cleaning, too, and propolize. Can chlorine be used? Norm has not seen problems with chlorine if you scrub and air dry it – and if the bees don't like it, they will propolize over it.

Should old comb from dead-out hives be reused? If you don't know what killed the bees, Norm urges that it is better to buy \$20 worth of foundation than risk losing a hundred dollar package. Even if the old comb has honey and pollen stores, it is probably safer to replace it.

Yellowjackets: Gary noted that keeping yellowjackets away from hives is key, and even though he reduced the entrance down to under an inch, he still had big problems. Granted, these colonies were weak, but Gary asked, is there any better approach? Norm noted that there are screens you can put over hive entrances: Kelley bees has something like this. Tim said that he takes yellowjacket towers and puts a bit of comb in there to lure in the yellowjacket queens, which are the only ones that overwinter. Baiting the traps with honey, or orange juice and sugar, as well as meat, will also help get those queens. One caution: now that bees are flying, if you put honey in a yellowjacket trap now on a warm day, you will get some honey bees, but that may be a sacrifice worth making to get the yellowjacket queens before they multiply.

Business Meeting Notes: March 11th LCBA Meeting

Treasurer's Report: Rick reported that the operating account has \$6774.09, with \$855.46 in the Youth Scholarship Fund. The operating fund figure does not count new memberships from tonight's meeting, nor the sales for packages/nucs.

Journeyman Class Update: Education Coordinator Tomme Trikosko reported that the Journeyman class was about to hold its first meeting with a dozen students signed up.

Swarm/Colony Removal - Policy Update: Given the volume of calls for swarm captures and colony removals in 2014, the board has decided to put the contact information given by experienced LCBA members who feel confident to lead carve-outs and/or capture swarms on the swarm and colony removal page of our website, broken down by area, and let the public contact beekeepers directly for these services. A sign-up sheet was passed around for those experienced beekeepers who wish to be listed. The board encourages these beekeepers to clarify with homeowners what they will and won't do ahead of time, as well as to get clear information from the homeowner about where the bees are, how high up, in what kind of structure, etc.. These are free services, though homeowners may elect to offer gas money or give a donation to the association. Those removal leaders who would like to get a team of LCBA helpers can contact Susanne, who will send details to the "bee team" list. In April, we'll pass around a sign up sheet for those who would like to be helpers.

Mentor Program: Call for Volunteers: A sign-up sheet for those who would like to help new beekeepers as mentors was passed around (see above for details about the mentor program).

Spring Youth Fair, May 2-3: Call for Volunteers: Dan Maughan passed around a sign-up sheet for those who wish to volunteer at LCBA's booth at the Spring Youth Fair.



What's a carve-out without bamboo skewers? Above, LCBA members skewering comb into frames at a June 1, 2013 removal; below, Kimo Thielges has a source for inexpensive skewers:

Want Inexpensive Bamboo Skewers for Colony Removal Season? Great suggestion from Kimo Thielges:

Kimo notes that LCBA members go through many packages of bamboo skewers each year during colony removal season, as they are great for pinning comb into frames. Kimo checked out bamboo skewers at Cash and Carry in Lacey (other Cash & Carries have these, too): a pack of 100 bamboo 12-inch skewers costs \$1.35, plus tax.

Also, Kimo & Fu-Mei visit Portland every 6-8 weeks to get specialty food at Asian Grocery stores. Kimo reports that “Hong Phat on 82nd was the same price as Cash and Carry in Lacey; Chang Fa market on Division was more reasonable: \$1.09 for a package of 100 bamboo skewers. Note: The owners of Chang Fa (James/wife) formerly owned the Panda Inn in Centralia. Their store, like the Panda Inn (when they owned it) is kept very clean. Chang Fa does sell 8-inch bamboo skewers; which cost 80-cents for a pack of 100. Supplies of bamboo skewers are limited to what is stocked on shelves, or product pegs at the Asian stores. They are restocked on an as-needed basis. Fu-Mei and I know the husband/wife owners of Chang Fa. I’m sure they would order what we would need, if we asked.

“Based on the foregoing information, it appears Cash and Carry is the best option for quantity purchases and immediate availability, but should LCBA members need bamboo skewers from Portland, I will be glad to purchase them for those that want an adequate supply on hand. (email: kimosabe@compprime.com)

“With that, I conclude the ‘skewer report.’”

~~ Kimo

A Song For the Start of Swarm Season: Never Let It Bee Said We Have No Sense of Humor Here...

~ Courtesy of Rich Harned ~

Hey, did you happen to see

The most beautiful swarm in the world?

And if you did, was it flying? Fly-ing

Hey, if you happen to see

The most beautiful girls that waltzed out on me

Tell then I'm sorry

Tell them I need my bees back

Oh, won't you tell them that I love them

BEES IN THE NEWS will be back next month. Meanwhile, there are many news stories concerning bees on our Facebook page.

ANNOUNCEMENTS

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?

Two farms – one in Centralia, one in Mossyrock – would like to host bees for pollination. Here are the details – please contact Amanda and/or Stephanie if you are interested.

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 .

May 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.

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

That's all for this month - take care, & bee happy!

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