Lewis County Beekeepers' Association:

November 2012 Newsletter

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Please note: repeat announcements, like our mentor list and beekeeping supply options, are now posted on our website: visit www.lewiscountybeekeepers.org. FYI: we will not post members' contact information (phone, email, address) online unless individual members authorize this; the secretary's phone and email are our online conduit for those who find our group via our website.

If you haven't seen our website, please check it out – if you have suggestions or resources you'd like posted, please contact Susanne (360 880 8130; Susanne.beekeeper@gmail.com). (\If you don't have internet access, but want mentor or supply information, please call.

UPCOMING LCBA EVENTS:

November 10: Calling East County! "Getting Started in Beekeeping" is coming to Morton, 1 – 4 p.m. at Centralia College East, Room 101. LCBA President Norm Switzler will teach this introductory class. Free & open to the public. If you'd like to attend, please call 360 880 8130 or email susanne.beekeeper@gmail.com so that we can plan for handouts & supplies.

November 14: LCBA Monthly Meeting, 7 p.m., 103 Washington Hall, Centralia College

Topic: Highlights from October's WSBA/WAS Joint Conference. Susanne Weil & Peter Glover will give an update on findings of interest to our group, focusing on Hopguard tests, new information about indoor overwintering (the Yakima project), swarm control ideas, WSU hygienic queens for our queen rearing project, and more.

Business meeting - topics will include:

- *** Clarifying our group discount status with Ruhl Bees**
- *** WSBA Journeyman course: options for LCBA members**
- *** East County Beekeeping Classes in Morton: update**
- *** Membership directory - forms available for those who'd like to be included in our 2013 (first!) edition**
- *** Holiday Potluck, door prizes, & more: update on plans / your suggestions**
- *** January is dues month: update on the benefits of membership & our LCBA scholarship fund**
- **And, of course, Beekeeping Q&A**

December 12: LCBA Holiday Potluck, 7-9 p.m.

Details are in the newsletter emailed to our mailing list. If you're accessing this on the website and would like to attend, please contact LCBA Secretary Susanne for details: Susanne.beekeeper@gmail.com, or by phone: 360 880 8130.

January 9, 2013: LCBA Monthly Meeting, 7 p.m., 103 Washington Hall, Centralia College.
Topic: Top Bar Hives: an alternative to the Langstroth standard. LCBA VP Dave Gaston will discuss how he uses top bar hives & will have samples for members to view.

February 13: LCBA Monthly Meeting, 7 p.m., 103 Washington Hall, Centralia College.
Topic: Swarm & Colony Removals: How They Work. Norm will narrate a slideshow of how a colony was removed from a structure in Onalaska in July 2012. Discussion: what's involved & how interested LCBA members can participate. It's a great way to learn more about bees!

March 9, 16, 23, 30: WSBA Apprentice Beekeeping class at the Morton Senior Center, 1 to 4 p.m. Registration details will be available soon; if you're interested, call Susanne at 360 880 8130.

Do you have suggestions for 2013 Meeting Topics? Please share! Contact Secretary Susanne Weil at susanne.beekeeper@gmail.com or 360 880 8130.

NOTES FROM OUR OCTOBER 10 MEETING

Topic: Planting for Bees: Planning Ahead for a Bee-Friendly Garden.

Speakers: Darren Gordon, House of Bees; Charles Bennett, WSBA Vice President

President Norm Switzler introduced newly elected WSBA Area 2 representative Franclyn Heinecke, who has taken over this role since Charles Bennett was just elected WSBA Vice President. Franclyn is working toward her Master Beekeeper certification and shared some materials she's compiled in that process for our website: click on Resources & Links, then Planting for Bees, and you'll see her checklists of Pollen/Nectar plants both west and east of the Cascades, as well as a paper she's written about bees' foraging patterns.

Charles Bennett and Darren Gordon, House of Bees, described a wide array of plants that bees love – and that flourish in southwest Washington using Charles' beautifully illustrated PowerPoint presentation, "Bee Flowers," as backdrop: you can find his presentation on our website at the link noted above. Charles also referenced "Northern American nectar sources for honey bees," a very thorough page on Wikipedia: http://en.wikipedia.org/wiki/Northern_American_nectar_sources_for_honey_bees. (If you don't have Internet access and would like copies of these resources, please call Susanne at 360 880 8130 and she will mail you a copy or bring one to our next meeting.).

The star of tonight's botanical show was **Phacelia**, which can yield 180 to 1500 pounds of honey per acre, depending on soil quality and depth, and 300 – 1000 pounds of pollen under optimum conditions. Charles called phacelia "the greatest flower there is." Although technically in same family as our locally notorious invasive tansy, phacelia is not on our state list for invasives and is very different from the tansy we can't plant. Phacelia is actually purple tansy, which, Darren noted, is not a good name for it. Its German name translates to "bee friend." Only in the south, particularly in Texas, is it called purple tansy. To call it tansy, Darren commented, is like calling a wasp a honey bee.

Charles suggested that if you break up the ground when you plant phacelia, you'll get a much better germination rate. He cut off buckets' worth of seed pods and crushed them into a big tub: this yielded seed for one third of an acre, almost half acre. These all came from seeds he mowed down, barely touching seed pods: he went through with a brushhog, but left plenty of pods, so it will come back up from the seed. Charles was asked how phacelia competes with grasses – can it be seeded on pasture? Charles said that it can if you break up the ground.

Another question: is phacelia in the borage family, and is honey from borage toxic? The answers were no, and no. An urban legend has arisen from one newspaper article that confused it with another plant.

Can phacelia be planted in fall? Darren reports that in his experience (Kitsap County north of Bremerton), phacelia is frost tolerant, but you get more bang for your buck if you plant it in spring. A hard freeze might kill it. If you don't water it, its flowering time is relatively short, but if you supplement water, it will keep blooming through the season. It will grow in marginal soil because it is used to desert conditions. If fall planting is what you're after, Charles suggests that kale, broccoli, and other members of the brassica family are great for fall planting.

Bachelor buttons spring up next after phacelia, and Charles's bees love them. Bachelor buttons are easy to work with because they self-seed. Also, they are a companion plant that attracts bugs from particular garden plants.

Borage is well known to many beekeepers as a good plant for the girls: Charles said that it can yield 200 pounds of honey per acre, and 60-100 pounds pollen. Borage is a vigorous self-seeder – if you plant it, it will reappear in same place the next year. If you like perfect 2 x 2 plots in your garden, though, borage is not your plant unless you watch it: as Steve Howard noted, it is highly prolific. Borage flowers can be put in human meals for decoration.

Buckwheat yields dark honey with distinct flavor; granulates fast. Kaye Gaston got 50 pound bags from Black Lake Organic (on Black Lake Boulevard in Olympia) – she and Dave planted buckwheat as a cover crop to get rid of thistles and attracted bees in the process. Kaye suggests waiting to plant buckwheat till all frost is gone: one frost and it's done. Gary Stelzner noted that you'd better put it where cows won't get to it, unless you want your cows to enjoy it instead of your bees.

Clover can help bees, yielding up to 500 pounds of honey per acre in a good year. Charles favors white clover. Bees can't get nectar out of reddish clover, whose flowers are constructed such that bees cannot get their tongues inside, though bumblebees can: Charles once had bees on 40 acres of red clover, and they almost starved. Pat Swinth commented that he had put his bees on sweet clover, but grass choked out the clover in the second year. Charles replied, "It's like when you try to grow weeds….grass just keeps getting involved."

Yellow raspberry was a great favorite among Charles's bees: "my bees won't let me get any of them," he said. **Wild daisy** [Bellis perennis], also known as English European or lawn daisy, is valuable, too: bees get great pollen from it.

Lemon mint, also known as monarda, blooms with a pretty purple flower, and bees love it. Bob asked if it is invasive like spearmint, peppermint: Charles and Darren said the lemon mint isn't as bad as those others. Darren said, "As a bee gardener, I like the stuff that you throw out: bees forage, and it comes back with a vengeance" (re-seeding itself).

Removing seeds: Charles noted that one challenge is getting the seeds out of these plants. In the case of phacelia, Charles just crushed it in a seed tub and had almost clean seeds; with other plants, this is not so easy. Each seed pod is different, and each needs to be fully dried.

Coreopsis flowers – Charles calls coreopsis cornflowers, as they are yellow with a reddish brown center: his bees worked a pasture of it all summer long.

Blue Bedder (Echium vulgare) is another flower bees love: Charles said that his bees, as of this meeting, were STILL working his blue bedder!

Gayfeather liatris, one of the few flowers that blooms from top down, is a native North American wildflower that produces tall purple bloom spikes in late spring and in fall: it is great for bees and butterflies.

Sunflowers attract not only honey bees, but many pollinators: Ted Saari commented that this summer, he saw at least 6 species of bees on his sunflowers. Charles noted that if you want to support pollination in the area where you live, it is helpful to plant a wide range of plants to help not only honey bees, but all pollinators.

Fall and winter natural feeding: in 3 minute video titled "Gardening for Bees," Darren showed crimson clover and arugula, gone to seed in late winter, as well as broccoli flower that had bolted. Anything in the brassica family, such as kale, will flower late in the season.

Finally, **weeds** can be good for bees. Ted noted that he won't mow dandelions since bees will feed from them.

What percentage of pollen and nectars do bees need? Gary asked about the percentage of pollen and nectars that bees need to make a hive viable, since it's possible to have an overabundance of pollen that bees can't use. What is the ideal proportion of nectar to pollen? Charles was not sure, but noted that it takes one cell of pollen and one cell of nectar to raise one bee, so, to Charles, that ratio suggests 50% pollen, 50% nectar. Bob commented that all things being equal, bees will self-regulate, but that if we overload our properties with any one plant, we might make that equilibrium harder for bees to achieve.

Darren noted that trying to plan planting based on an ideal ratio is very hard, especially here in Pacific Northwest: for example, buckwheat nectar is only available in the morning, but bees may not get out until noon-ish because of our temperatures. In general, nectar availability can be a challenge: we don't get hot temperatures early in the day. It's best to provide a mix of things that will be abundant pollen and nectar sources, but beekeepers must realize that we may never get ideal conditions. We can water our plants and do our best to keep them viable for bees.

The cut flower industry and hybridizing: the cut flower industry is hybridizing sunflowers, among many other flowers, to make them pollenless so they don't make a mess on people's tables. Beekeepers should not buy flowers bred for table arrangements. Charles doesn't buy any seeds that are hybrid – he is writing a paper for his Master Beekeeper course concerning the quality of pollen from hybrid plants: is it the same as pollen from natural seed, or could pollen

from hybrids and GMOs actually be destroying the immune systems of his bees? Oregon State University is doing research on one brand of pollen, asking what happens when bee is put into almonds and that is the only nutrition they get (note from your scribe: this is work being done by Dewey Caron's research partner, Ramesh Sagili: you can find more details on the OSU website).

Winter foraging? Bees can and will forage during the winter months. Darren has observed bees active in December, even, once, flying when it was 46 degrees. He has seen bees on his planting squares in his greenhouse in January. Even so, Charles likes to have 60 pounds of honey in his hives going into winter.

Bakers' sugar and the "camp method" for winter feeding: Putting bees to bed, Charles uses the "camp method," placing newspaper on top of the hive. He uses bakers' sugar, which has an 8% moisture rate and is between granulated & powdered sugar: Charles says that his bees actually use this all winter. He sprays newspaper with water and puts 5 cups bakers' sugar on top of the newspaper: this makes the sugar harden. Then, he adds a small spacer, one and a half inch with hole about 5/8 inch in spacer, so the bees have an upper entrance, and on top of that, he has a 2.5 inch box with a door spring. He fills this box with wood chips, put on top of spacer, inner board on top of that, telescoping top on top of that, sliding back to the edge. Charles does this every year and has only lost one hive per year with this method. Charles was asked what kind of wood chip he uses: he replied, any wood chips, straw, or paper. The idea is to have it be a moisture absorber that breathes.

Screened bottom boards and sliders: the perennial question. . . Charles was asked whether he uses screened bottom boards: he answered that he has some of each and builds own slatted board, leaving about 6 inches of solid board in front to block the wind with a congregating space in the back for foragers returning to the hive. He thinks this also helps with cleaning solid bottom boards. He never puts in bottom sliders; rather, he says that he leaves the screened bottom boards open, noting that Sue Cobey doesn't put in bottom sliders in Iowa.

Virtual observation hive: Darren demonstrated his virtual "observation hive," which has an iPad loop recording in the observation window: a very cool fake observation hive, it also works as a demonstration hive for hive components. It's an actual, functional Warre hive, with a modified top bar.

Top bar hives & honey extraction? Darren was asked how he extracts honey from this top bar hive. He noted that he does his supering from the bottom, not the top, since the bees build down. He then crushes comb to extract honey. He doesn't take all the honey, though, to help the bees over-winter. The idea is that the brood would migrate down and top would be honey stores, but in our climate, it is hard to manipulate a top bar hive to stop swarms, so usually, the bees will build out 2 or 3 boxes and then kick out swarms. In Germany, they can do this up to 5 to 6 boxes. Norm commented that he's been brainstorming about whether the way we manage hives isn't counterproductive since bees want to build down.

Frames without Foundation: Charles switched to foundation-less frames this year: he takes a regular Langstroth frame and uses the bar, but no foundation. He turns the pop out bar so it stands sideways and staples it in – they will build from it. He says the bees built comb much

faster with their own wax than they do in frames in which foundation is established for them. Do bees build less on plastic foundation? Charles answered that if you make sure they have a pattern, they will build out. Norm asked if Charles replaces wax and lets them make new every few years: Charles answered that he does.

Michael Bush (author of *The Practical Beekeeper Volume I, II & III*, and *Beekeeping Naturally*), argues that every year the foundation is more built up, that leaves less available building space for bees. In the wild, feral hives' foundation measures 4.9 millimeters, so bees hatch out a day earlier – the worker in 20 days, the queen in 15 – and this interferes with the cycle of Varroa mites' reproduction. Varroa mites are used to hatching out on regular timetable. Also, by letting bees build their own foundation with smaller spaces, you get smaller bees – and this means that tracheal mites can't get into bees as easily.

Lowering the ph. factor of sugar mixes: Honey has a ph of 4.9 and sugar mix has a ph of 6.9: Charles uses organic vinegar to lower the ph of his sugar mix. You can also use Vitamin C tablets to lower the factor of ph. Nosema likes a higher ph, so it is helpful to get the ph down toward the ph of honey. Charles is experimenting with 4 ounces of vinegar for 5 gallons of syrup. He is still learning, and these are just some of the things to consider. Often studies only test things for a year. Michael Bush (author of *The Practical Beekeeper* and *Beekeeping Naturally)* has been testing for years: he does not treat for anything, and yet his bees make it through winter and live. Darren commented that his hives that do the best are the ones he goes into the least.

Darren brought free seed packets to share with LCBA members, who swarmed over these packets as we took a meeting break.

October Business Meeting:

Mentorship Workshops, 2013: President Norm reported for the board that we are planning to expand our mentorship program in 2013. Gary Stelzner, our new Mentorship Coordinator, is willing to host workshops in his well set up bee yard. These workshops will start in spring. Among the workshops we'd like to host would be hive building, hiving bees, and how to do an effective hive inspection. Hive inspections often pose particular confusion: do you have a good brood pattern? A good laying queen? Can you identify drone brood? The plan is for a number of our more experienced beekeepers to attend, because different people have different perspectives from which we all can learn. These workshops would be not only for "newbees," but also for those in their 2nd or 3rd year of beekeeping who want more experience. ***If you have a particular topic that you'd like to see a mentor workshop about, please contact Susanne or another board member.*** Deanna Brix asked if we have a workshop or at least get information on honey labeling requirements: Susanne will follow up.

We also plan to build our available group of mentors who can visit new beekeepers' bee yards and help them troubleshoot. Norm noted that it's not necessary to be an expert who has kept bees for years to do this: several beekeepers who started keeping bees when LCBA got its first package orders in 2009 have visited new beekeepers' yards this year and been able to offer effective help inspecting hives. The one important guideline is not to be afraid to say that there's

something you don't recognize or understand, and then call in someone more experienced. ***If you would like to try volunteering as either an experienced or intermediate mentor this spring, please contact Susanne or another board member.***

Queen rearing course or project: WSU's apiary will give us two free hygienic queens to propagate from, and all they ask is that we report on how they fared. Norm noted that there will be variations among queens – not only WSU's, but any local queens from whom we graft - and how they propagate. Our ideal plan is to have a stock of locally reared queens that LCBA members can get to re-queen their hives quickly, rather than having to place an order and wait up to a week to re-queen, a time lag that sets a colony back.

Membership directory? The Master Gardeners have a pamphlet-sized directory with members' names, contact information, and areas of interest. This enables their members to contact each other with questions or about shared interests. If LCBA comes up with a similar directory, the Extension office can produce it for us. This would be a print directory for members – we will not share members' information online. Kim Weiland suggested that we send out a form and let everyone fill it out and send what information they're comfortable sharing. The board will develop a form and send it around this fall.

LCBA Board meetings: our LCBA board meetings are now every 4th Wednesday, from 6 to 8 p.m. at our old meeting place, the Extension classroom at the Old Chehalis Courthouse. It was difficult to get all our business done in an hour before our monthly meetings, and this quarter, we can't get into Washington Hall 103 until 6:30 p.m. for our monthly meetings: hence the change of day and venue. Board meetings are open to our membership and anyone interested is welcome to come. If members have issues they'd like to bring to the board, they should email or call Secretary Susanne to have their concern placed on the agenda.

LCBA Speakers Bureau? Norm, Gary, and others have given talks to local groups about beekeeping and bee-related topics. Norm has spoken to the Sons and Daughters of the American Revolution, Gary is speaking to a garden club in Winlock in November, and Bob, Peter, and Susanne have done talks at the Master Gardeners' Gardening for Everyone events. If you know a group that wants a speaker and don't feel you can do it, check with the board, and we can arrange a speaker. If YOU have particular topics you'd like to share with community groups, please let the board know. It would be a nice public service if we could put a list of topics about which we could speak to local groups on our website.

Nucs v.s. packages: how did yours fare this spring and summer? For our newer members, Norm defined a package as 3 to 4 pounds of bees with a queen in cage, as opposed to a nuc, which is a smaller box containing 3 to 5 frames with brood, food, and a mated queen already installed.

Pat Swinth reported that he put all his colonies, both packages and nucs, in bottom boxes, and placed a 2nd hive body with drawn comb on top, using boardman feeders: after the weather improved, he stopped feeding, and then one package hive immediately went down, apparently to robbing. Others of his packages filled out, but he didn't take honey. In contrast, Pat's nucs went "like gangbusters": he got a good honey yield from them, and they diid not swarm. Now, Pat

really favors nucs over packages. Norm noted that some members said that their package bees did as well or better than nuc bees, but others found their nuc bees were hardier. Norm helped pack the nucs and only got one sting: "these bees are busy and dedicated," he said. Ted and Kathy bought a package and a nuc; their package bees filled up, but they never got a super on; in contrast, their nuc quickly built to a top box and a super, and they got honey only from their nuc: 9 quarts of honey from that one super. Mel was not happy with his nucs – they seemed to have just hatched out and the nuc box was missing its feeder. Susanne and Peter reported that though their package didn't survive, their nuc did: it never built up to a second hive body, but seems to have a good honey and pollen supply for winter.

Norm recommended using a 9 frame brood box because the bees wanted to build comb out further. The number 9 works best for supers, too: it is so much easier to uncap frames when you have 9 frames instead of 10. With 9, the bees will build out capped honey till they get to their bee space, leaving higher-standing capped honey cells that are much easier to uncap with the hot knife, requiring much less scraping with the honey fork. Pat added that's important to put in 10 frames when using <u>new</u> foundation, always, or bees will build comb every which way. Later, you can take one frame out and respace them.

We will revisit the nuc vs. package question after over-wintering, though we may have to place our spring orders before we can get into our hives to inspect them and assess over-wintering survival. Gary noted that he fed in March and April, but still lost 4 of 10 hives: he wondered whether pollen patties would make a difference. Some have used them with success. Norm noted, though, that even in January when it is 45 degrees or more, bees will forage and can find food from anything with catkins (hazelnuts, filberts, alders, etc.).

Yellow Jackets: Many of us lost hives to yellow jackets this year. Norm suggests putting out traps, because yellow jackets will make a relentless attack on bees. As soon as you start seeing yellow jackets, Norm recommends necking down the entrance to two fingers' width. Gary noted that if jackets are going into hive they will destroy defenseless bees inside – he advises necking down to a one inch entryway. Once the yellow jackets push bees' population to a tipping point, they'll destroy the colony. To make a trap, you can buy a commercial type, but Norm noted that commercial traps may not work: yellow jackets want meat and go for bee larvae, so it may be better to use meat. Norm simply takes a scrap of old meat, puts a bowl of soapy water under it, and he finds that yellow jackets will eat until they are so gorged they drop into water and die. Using this method, it's possible to get dozens to hundreds of yellow jackets in a day or two.

Renzy Davenport noted that if yellow jackets are harassing your bees, you'll see bee parts on bottom of your screened bottom board. He buys a plastic bag type of wasp trap with a chemical inside: you add water to it, similar to the bag fly traps. Renz reports that not only are these are very good at attracting yellow jackets, but they last longer than the yellow tube type traps with the chemical in it. Also, Charles Bennett uses a soap bottle with orange soda for yellow jackets – honey bees don't like it, but yellow jackets do.

Also, Renz combats yellow jackets with a specially made entrance reducer whose design went completely over your scribe's head. Answering an email, Renz reported that his

technique works like this: he makes "an entrance modification using a wood framed box and hardware cloth (metal screen) covered entrance reducer/modification with the entry point at the top of this modified box. When your bees come out of the hive, they have to climb up to get out through a small opening in the screen. This forces the yellow jackets to have to crawl down and into an area where more honeybees would be as they come out and climb up to depart. Yellow jackets don't really like to do that. Think of it as a small wood framed box covered in screen and a small entrance at the top. The whole thing fits in front of the width of the entrance...kind of like a wide cage."

BEES IN THE NEWS:

"Host adaptations reduce the reproductive success of Varroa destructor in two distinct European honey bee populations": At our LCBA meetings, we've often discussed whether it's better to treat for mites and other threats to bees, or to let the bees adapt, to "breed a better bee." A paper published in *Ecology and Evolution* (2012; 2(6), 1144-1150) suggests that beekeepers' efforts to control mites can actually be harmful. It's true that heavy mite loads open the door to viruses that kill colonies. However, this study found that "a few subpopulations in Europe have survived mite infestation for extended periods of over 10 years without management by beekeepers and offer the possibility to study their natural host–parasite coevolution." In colonies studied in France and Sweden, bees "evolved resistant traits that reduce the fitness of the mite (measured as the reproductive success)" by about 30%. As an apparent result of reducing mite populations, the colony was able "to evade the development of overt viral infections." To read more, visit: http://onlinelibrary.wiley.com/doi/10.1002/ece3.248/pdf.

"Zombie" Bees Electronically Enhanced to Help Solve Die-Off Mystery": On Sept. 12, *National Geographic News* reported that entomologists are equipping bees parasitized by zombie flies with bee-sized radio trackers. John Hafernik of San Francisco State University speculates that as parasitized bees leave hives to cluster around outdoor lights, they may be "'committing altruistic suicide' to protect their hive mates." Another possibility: zombie flies may be "mind-controlling" bees, making them fly at night. Though Hafernik doubts that zombie flies have anything to do with colony collapse disorder, he hopes that tracking the bees "could shed light on the mechanism behind abandonment." For more information, visit: http://news.nationalgeographic.com/news/2012/09/120912-zombie-bees-tagged-science-zombies-zombees/.

If you missed the first buzz around the "Zombie Bee" story, visit www.zombeewatch.org, and check the "Bees in the News" link on our website – under Resources & Links - for details of how parasitic zombie flies puncture bees' abdomens with their ovipositors, laying eggs that grow to mature flies inside the bees, eating the bees' organs from inside and causing the bees to fly at night before dying. Zombie flies were first discovered in Washington State by a Kent beekeeper last September. . . . just in time for Halloween ☹

"Honey-bees found to have bite that stuns," BBC News, Oct. 26: Biologists in Greece have discovered that honey bees actually bite pests like Varroa mites and wax moths, which are too small for bees to sting. When bees bite, they secrete a chemical called 2-heptanone which

stuns these pests, giving the bees a window of opportunity to kick the mites or moths out of the hive. 2-heptanone is now being studied for possible use as a local anaesthetic for human beings. For more information, visit: http://www.bbc.co.uk/news/technology-20080389.

"Bees Producing Blue and Green Honey: Are M&M's to Blame?" Oct. 4, ABC News.com: This fall, honey bees in the Alsace region of France produced blue and green honey. Investigators traced the phenomenon to a biogas plant that breaks down wastes from a Mars plant, and it seems that bees sampled the runoff. Though Mars is promising to fix its waste storage process, it's too late to help beekeepers in the region, who have had a poor year for honey yield. For more details, visit: http://abcnews.go.com/blogs/headlines/2012/10/bees-producing-blue-and-green-honey-are-mms-to-blame/. For information about the poor 2012 honey harvest across Europe, see Hannah Briggs' Sept 27 article, "Honey Suffers After Bad Year for Bees," at http://www.bbc.co.uk/food/0/19585638.

LCBA Announcements & Upcoming Educational Opportunities:

Getting Started in Beekeeping – An Overview for East Lewis County:
November 10, 1 – 4 p.m. at Centralia College East, Room 101. President Norm Switzler will teach this introductory class. Free & open to the public. If you'd like to attend, please call 360 880 8130 so that we can plan for handouts & supplies.

WSBA Apprentice Beekeeping Class – March 2013 – East County: If you missed our fall 2012 class, mark your calendar for March 9, 16, 23, and 30, 2013: President Norm will teach the WSBA Apprentice class on these Saturday afternoons, 1 – 4 p.m., at the Morton Senior Center.

Interested in the WASBA Journeyman or Master Beekeepers' Classes? Visit http://www.wasba.org/master.htm for the basics – for more detailed information, you can contact Louis Matej at journeyman@wasba.org or 253-921-5612 for the syllabus. Jon Wade reports that the Olympia and Pierce County groups both conduct Journeyman level classes.

Western Apiculture Society: November Newsletter now online. Among many informative articles, you'll find Jim Bach's provocative talk, "What Is Sustainable Beekeeping," along with a number of articles by speakers from last month's joint WSBA/WAS conference in Tukwila. To read it, visit: http://groups.ucanr.org/WAS/WAS_Journal.

Respectfully reported—bee happy!

Susanne Weil, LCBA Secretary: Susanne.beekeeper@gmail.com; 360 880 8130