

Beeing Prepared

Cowlitz Beekeepers Association Newsletter

Dedicated to Preserving the Honey Bee through Community Action, Awareness and Education
October 2021

Next Meeting:

Where: Nearly any place Via Zoom

When: October 21, 2021, 7:00 PM

Speaker: Michele Colopy

Topic: Pesticides and Beekeeping

If you live in Cowlitz county or the surrounding area and find honey bees fascinating, then you should consider joining us. Reach us on Facebook by searching for Cowlitz Beekeepers Association or check out our website at:

<https://cowlitzbeekeeping.wixsite.com/website>

Association Officers and Board:

Bill Holmes, President (360) 430-4077 or

cowlitzbeekeepers@gmail.com

John Holmes, V. President (360) 673-8787

Zenobia Scott, Secretary (360) 425-2314

Zebscott56@gmail.com

Barbara Skreen, Treasurer

Dixie Tollefson, Trustee (360) 431-1018

Dave Scott, Trustee (360) 425-2314

Kathy Scott, Trustee (360) 601-0393

Ken Curtis, Trustee (360) 261-2795

Michele Colopy has been focused on honey bees, beekeeping, and pollinator education for more than nine years. She co-founded the nonprofit LEAD for Pollinators, a hive of experienced, diverse, purposeful individuals collaborating for the health and sustainability of honey bees, native pollinators, and the keepers of the ecosystem. Her father was a beekeeper in southeast Ohio for their small apple orchard. She keeps honey bees in the city, and has replaced her crabgrass front yard with pesticide-free pollinator flowers for her honey bees and native pollinators.

Learn the pesticide exposure routes for bees, the synergistic effects created, and how we can work to reduce pesticide exposures, ensuring healthier honey bees and native pollinators. A discussion of ecosystem exposure to pesticides, the build-up of pesticides in wax, and the research that details the cumulative impacts to the hive will be presented. Most importantly you will learn how to reduce the pesticide exposure to your own honey bees through easy changes in your hive management.

Zoom Monthly Meetings

We had hoped to have resumed in person meetings but that is not happening. Zoom Meetings have been a great alternative though. We have had incredible speakers for over a year now and have engaged our membership remotely and successfully. All you need is a computer or smartphone with speakers, a microphone, and a camera. Join us at our next meeting. Click the link I will send out a few days before the next meeting.



Decline in Queen Quality?

by John Holmes

The Bee Informed Partnership survey of 2020-21 list queen issues as the second leading cause of colony loss reported by commercial beekeepers. Many queen issues are “relatively” new, but if you have not been keeping bees 40 years these issues may appear as normal occurrences. Robert Patterson, a longtime beekeeper located in England, in his article describes the changes he has seen and places queen issues into three groups: young queens failing, young queens being superseded, and queens “disappearing”. Although genetics of the queen plays a role, I believe queen genetics have not declined. What has changed over the years is the environment that queens must survive in. New parasites, the spread of viruses, changes in nutrition/forage plants, chemicals brought into the hive or placed in the hive for treatments are all changes that have occurred in the past decades. Jerry Hayes in his column in ABJ brought to my attention that the queen is unique, unlike the worker and drones, with her long lifespan she is exposed to every hive treatment.



Some recent studies reinforce that the cause of queen failure is complex and can involve multiple factors. A study found that exposure to extreme temperature, hot or cold, during aircraft shipping reduces sperm viability. Another study showed the potential relation between the presence of virus and poor sperm viability.

Today's beekeeping has new challenges to maintain healthy and productive hives. Trade offs will need to be made and beekeeper will need to monitor their hives for queen health. The quality of brood pattern is considered a good means of judging queen quality. A study by Lee and coauthors shows this may not be the case. “We observed that brood patterns of queens originally from poor-brood colonies significantly improved after placement into a good-brood colony after 21 days, suggesting factors other than the queen contributed to brood pattern.” This point out there is much still to learn and for me keeps beekeeping a fascinating experience.

Virus presence

<https://www.technologynetworks.com/analysis/news/why-are-queen-bees-failing-to-reproduce-344686>

Effects of shipping

<https://link.springer.com/article/10.1007/s13592-020-00756-3>

Roger Patterson

<http://www.dave-cushman.net/bee/queenperformanceproblems.html>

Lee, K.V., et al, Is the Brood Pattern within a Honey Bee Colony a Reliable Indicator of Queen Quality? 2019.

<https://www.mdpi.com/2075-4450/10/1/12/htm>

Columbia County Oregon Beekeepers on Thursday October 7th at 6pm will present a unique event. Deb Elder, founder of the Flippin Lyme Foundation, will talk about Apitherapy. Specifically, she will demystify venom therapy for autoimmune diseases including Lyme infections. Message Linda Zahl using Facebook messenger for the Zoom link. <https://www.facebook.com/groups/196368957189804/> Or contact Bill

Join the Washington State Department of Agriculture, Dr. Samuel Ramsey, and Washington State University Extension to learn about *Vespa mandarinia* and the threat they pose to honey bees. This webinar will showcase Dr. Ramsey's experiences beekeeping with the hornets in their native range. Beekeepers will also learn how to differentiate hive losses due to these hornets or for other reasons.

Facebook event link: <https://fb.me/e/12WhTtBYE>

Tuesday, October 5, 2021, 5:30 PM

[Join meeting](#)

Meeting number (access code): 2452 021 6456

Meeting password: T8e3N2Yu54d

Oregon State Beekeepers Association 2021 Fall Conference








Registration is now open for the 2021 Fall Conference, our centennial, when we plan to again meet in Florence—and online! The event is scheduled for October 22–24. Information as it becomes available at: orsba.org/2021-fall-conference.

BEEKEEPERS CALENDAR OF SEASONAL ACTIVITIES

Different Season, Different Activities

Suggested Activities for Beekeepers in the Coastal range from Washington, Oregon and Northern California...

October Action

-  The window is closing for getting your hives ready for winter. If it is still warm, you can feed with heavier 2:1 syrup.
-  Take your winter losses now. Combine weak hives with stronger hives.
-  Make sure your hives are off the ground—on a pallet or other structure—to prevent moisture from seeping into the hive and to provide ventilation. Having the hive about 18 inches off the ground can help deter skunks and other critters.
-  Keep hives exposed to the sun with entrances faced away from prevailing winds.
-  Tilt hives so water drains away from the entrance if you don't have screened bottoms.
-  Bees can deal with cold but being wet will kill them. Ensure proper ventilation and that lids do not leak.
-  You can also add a 'quilt box' or some absorbent material above the inner cover to soak up condensation that the bees create as they shiver to keep warm. This prevents the condensation from dripping back down and chilling the bees.

Handmade Proud:

Looking to buy new woodenware at reasonable prices?

- Bottom Boards - Top Covers - Inner Covers - Hive Boxes and more...

Contact **Gerry Herren**
Ph. (360) 355-0051
Swarmchaser40@gmail.com

Members Can Borrow the Club Extractor

Contact Kathy at 360-601-0393 to schedule.



Out in the Bee Yard

Bill Holmes

The last 10 days of September saw us camping the Oregon coast. We started at Fort Stevens and ended at Harris Beach in Brookings. Short hops and brief explorations. I had forgotten or misplaced the impact of the natural beauty of cliffs, haystack rocks, and wildlife that the coast of Oregon delivers. At Bandon, Oregon we stopped into a farmers market and I found a honey booth. I was talking to the beekeeper and also asked about the darker honey he had. He explained that it was Meadowfoam from the Willamette valley. He said it had a taste like vanilla and marshmallows. I had to buy it. Meadowfoam (*Limnanthes alba*) is a low-growing herbaceous winter annual that is adapted to poorly drained soils. The common name "meadowfoam" is due to the appearance, at full bloom, of the plant's solid canopy of creamy white flowers that resembles sea foam on the surf. Meadowfoam grows to a height of 10 to 18 inches. It is an early nectar source and beekeepers remove supers before the blackberry bloom starts to keep the honey undiluted from the milder honey.

Commercial development began in 1980 on an experimental farm in Oregon. The oil from meadowfoam seed has unique chemical properties that make it one of the most stable vegetable oils known. Meadowfoam oil is widely used in cosmetic and hair-care applications due to its stability, lubricity and ability to stay on the skin. Some examples of existing specialty applications include massage lotions, sun block creams and salon-quality hair-care products. The crop is pollinated using commercial beekeepers. They tend to not produce a honey crop as a sideline, so it's the small beekeepers on the periphery of the fields that sell meadowfoam honey. There doesn't appear to be a large supply on the market. As for the taste, it's quite the surprise. There's definitely a vanilla flavor and maybe marshmallows. Definitely unique and like nothing you've ever tasted, and I liked it, but maybe not on everything.

My hives were mostly packed with honey back in August and I never got around to weighing them. I use a handheld luggage scale to lift the back of the hive, which doesn't give me the exact amount of honey stores, but I have been doing it for quite a few years and I can interpret the results. I regret not weighing them until today, but now at least I'll always have today in the records. I expected mostly very heavy hives but that did not happen. The 4 lightest averaged 47 pounds and I like to see 55 in October. The other 7 averaged 67 pounds and are definitely good to go. All 11 are double deep hives. I believe there is still time to feed 2:1 syrup and one 25-pound sack of sugar will make 30 pounds of sugar honey, or 7.5 pounds per hive. That would get the average up to 51 pounds, so I'll probably need to do a little more. You can use any white sugar/granulated sugar. It doesn't matter if it's cane or beet. Avoid organic sugar, brown sugar, confectioners' sugar, raw sugar, or anything else. Drivert sugar is fine but I don't think it's an improvement over every day table sugar for syrup. I don't feed pollen patties, you can make up your mind on that. Low protein patties would not be a problem though.

I installed entrance reducers 2 weeks ago and I'll put 1" thick Styrofoam below the outer cover in a couple weeks. All hives have small upper entrances for egress and ventilation. I'll treat with Oxalic acid vapor in November. Then I'll just do monthly weighings until spring. It's great to have a plan but be prepared to adjust.

Bill





Our friend Dave Kell passed away July 27th. Dave had been keeping bees since the early 60's and maybe even before that. He's been a member of CBA since its founding in the early 80's. He came to our last in-person meeting back in February 2020. He was always warm and welcoming with a smile. Dave was a fisherman, hunter, beekeeper, and more importantly husband and father. He drove a LeTourneau log stacker, which is the very large sort yard machine that all of us would like to have driven just once. We all need people like Dave in our lives, those that are full of fun, adventure, love, and always willing to lend a hand.



Zoom Meeting Recordings

Most of our meetings have been recorded and loaded to our website. I frequently forget to start the recording at the beginning so it's like you came to the meeting late. Look for "Bee Information" then video.

<https://cowlitzbeekeeping.wixsite.com/website>

Hmm

Our earliest ancestors covered beehives in mud and threw them into enemy caves. Romans put them into catapults and hurled them at their foes.

Before there were cannonballs, sailors would throw beehives on other ships' decks. The word "bombard" even comes from the Ancient Greek word "bombos," which means "bee."

Elections

Each October we nominate for Trustees and Officers for your Association. We normally do it at a meeting. Instead, I will send out an email asking for nominations. Then in the November newsletter I'll publish the names of those who will make themselves available to serve. The election will be held the same way we did it last year using an emailed ballot sent out in November



A beekeeper in Cathlamet asked if I was interested in some hive gear. I brought it home and am offering it to someone who would like to rehome it. 3 deeps, one has undrawn plastic foundation, one has some unpleasant drawn foundation, the other is just an empty body. Two queen excluders, 2 hive top feeders, 1 western super empty, 3 solid bottom boards, 1 migratory top. Not pristine but still has some life. Call Bill, it's in Cathlamet.

Using DNA to search for the true origins of imported honey

By Department of Homeland Security (DHS) Science and Technology Directorate

The Department of Homeland Security's Science and Technology Directorate (S&T) knows that food labels can be misleading, especially when it comes to honey imported into the U.S. Honey imports have nearly doubled in the last decade—from 251 million pounds in 2010 to 416 million pounds in 2019—which is great news for consumers who now have more access to some of the sweetest stuff on earth. However, this tremendous growth in demand also has a dark side that many might not know about—adulteration and mislabeling of honey to hide its true origin have become a global issue.

Illicit importers, who are economically motivated to evade tariffs or sanctions, have made it a practice to affix fake labels onto jars, indicating the honey is from a different country of origin or disguising cheaper honey as sought-after expensive types. Some even dilute honey with ingredients like syrups and sugar. New Zealand manuka honey, for example, commands a high price on the market, up to 100 times higher than other honey types, as it is very in-demand for its putative health benefits. It is also one of the most adulterated types of honey. In a recent lawsuit, U.S. beekeepers claimed adulterated honey from Asia caused prices to plummet and forced them into financial ruin.

“Adulterated honey is a tremendous problem for the U.S. honey industry, because it drives the market price down, and U.S. producers can't compete with the lower market value of imported honey,” said Stephen Cassata, a senior science officer and acting lab director of the U.S. Customs and Border Protection (CBP) INTERDICT Science Center. “Dealing with this issue is a whole-of-government approach, and we are currently collaborating with other federal agencies (including the Food and Drug Administration and U.S. Department of Agriculture) on joint operations targeting honey enforcement.”

CBP is tasked with enforcing hundreds of U.S. trade laws, including the proper classification of goods under the Harmonized Tariff Schedule of the United States, and assessing applicable tariffs to ensure that importers pay the appropriate duties on entered goods. To help CBP determine the true sources of honey, S&T enlisted the expertise of the Borders, Trade, and Immigration Institute Center of Excellence (BTI), led by the University of Houston, for a project called Honey DNA. S&T invested in cutting-edge forensic science that can improve the speed and efficiency in verifying the country of origin of commercially available honey and its path to the supermarket shelves—specifically, S&T has been looking at how the unique makeups of products coming to the U.S. match how they are represented on the packaging.

“This project developed a means to identify honey countries of origin using the DNA in pollen and DNA dissolved in filtered honey,” said BTI executive director Kurt Berens.

Honey is filtered for a variety of reasons, including the attempt to hide its source plant by making plant identification by pollen very challenging.

“BTI's testing method could potentially provide another capability for CBP to determine country or region of origin for Antidumping and Countervailing Duty enforcement,” said CBP deputy director Patricia Hawes. “It complements testing capabilities we already employ to determine country of origin of honey.”