

# The Voice of Professional and Backyard Beekeeping

# Cowlitz Beekeepers Association Newsletter



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

April 2021

Issue 4

## **Next Meeting:**

**Where:** Anywhere worldwide on your computer via Zoom

**When:** April 15, 2021 7:00 PM

**Speaker:** Charlie Vanden Heuvel

**Topic:** Swarm Triggers, Behavior, and Who Leaves.

If you live in Longview or the surrounding area and already keep bees, intend to do so or are simply interested in this fascinating hobby, Cowlitz Beekeepers Association is the association for you. Even if you don't keep bees, joining us will help support our cause, our community action and awareness and education programs.

## **Association Officers and Board:**

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Dave Scott, Trustee (360) 425-2314

Kathy Scott, Trustee (360) 601-0393

Ken Curtis, Trustee (360) 261-2795

**Charlie Vanden Heuvel** reacquainted himself with tending to honey bees as he settled down. Rather than dipping his toe into the hobby, he dove in through attending multiple bee clubs, entering the Oregon Master Beekeeper Program and, most helpful, mentoring other beekeepers throughout the Columbia Gorge. Currently at the Master Level of the Oregon Master Beekeeper Program and an Instructor for the Apprentice Program for the Columbia Gorge region.

## **2021 Nuc Purchase**

Our Nuc group purchase has closed for 2021. It looks like our total is 89 colonies which are tentatively scheduled for delivery on April 17<sup>th</sup>. Everyone who ordered will be contacted about when and where to pick them up. If you haven't heard anything by April 10<sup>th</sup> contact Bill

## **2021 Membership**

<https://cowlitzbeekeeping.wixsite.com/website/registration> click this link, fill out the form, submit. Then send your check to the listed address on the form. Cash payments can be arranged. Thank you for supporting Cowlitz Beekeepers Association.

## **Our Zoom Meetings**

Zoom video conferencing is celebrated for its ease of use, high quality video and audio, and collaboration facilities such as text chat and screen sharing. All you need is a computer or smartphone with speakers, a microphone, and a camera.

Attendees can join a Zoom meeting without signing into the app. Join us at our next meeting. Click the link I will send out a few days before the next meeting. If you are not a member but would like to attend a meeting, request the code to [cowlitzbeekeepers@gmail.com](mailto:cowlitzbeekeepers@gmail.com)

## Goldilocks and the 3 hives by Dewey M. Caron

I referenced the Goldilocks nursery rhyme as it relates to our spring beekeeping during the March Zoom. Recall that Goldilocks entered the bear's house in the forest and found 3 bowls of porridge, tried 3 chairs and 3 beds. In each instance there was one too hot/too big/too hard another too cold/too big/too soft, but the third bowl/chair/bed was Just Right. When we look for the first time at successfully overwintered colonies and then begin to manage our bee colonies in the spring, one/some colonies might be too strong, others might be too weak but a third group will be "Just Right". The challenge, especially if you have less than 3 colonies, is to figure out the too strong, too weak, or just right colonies.



I discussed options to divide (split) colonies too strong once they begin to rear drones and the workers construct queen cups, the earliest beginnings of swarm preparations. Depending on a number of interrelated factors, the queen will lay eggs in some of those cups, which is the first visible sign to beekeepers that they are stepping towards swarming. Factors, besides rearing of drones, include hive ventilation, crowding, size of brood area, age of queen, queen's ability to produce queen substance in sufficient amount for the growing population and the ability of workers to distribute the queen's pheromone daily to every worker in the hive. For too strong colonies we may need to flatten the growth curve due to swarming "fever".

Colonies too weak may dominate our management time. Weak colonies may starve, or they may fail to grow and become sufficiently populated to take advantage of spring pollen and nectar availability. We can feed, unite and/or bolster with brood (and bees) taken from a strong colony but no matter what we do, some of them will not attain Just Right grading.


The Just Right colony grouping, which we would hope includes most of our spring colonies, will take management time and effort too. Spring weather will dictate whether we feed, reverse, open the brood area, add a super or simply continue to keep tabs on them as normal spring development proceeds. Depending upon season, we eventually may need to do a walkaway split or shake bees to create a queenless split. How we split will depend on finding the queen/how we elect to permit the queenless portion to requeen itself. In the perfect world we can remove frames of bees to flatten the too strong colony growth curve while bolstering those weak colonies. If we want to make up for overwinter losses then waiting until swarm cells appear and then doing our split using the developing queen cells to requeen, will help keep our colony 'out of the trees' and ready to store surplus honey for eventual harvest. As we manage, we should still have time to capture swarms from tree colonies.


And speaking of winter loss - still time to complete your survey at [pnwhoneybeesurvey.com](http://pnwhoneybeesurvey.com). Appreciate the responses from Cowlitz beekeepers.


## BEEKEEPERS CALENDAR OF SEASONAL ACTIVITIES


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


### Prepare Hives for April

 Check colonies for adequate Honey/Pollen supply. If colonies do not have adequate honey stores feed with 1:1 sugar syrup with Honey-Bee-Healthy. This month colonies can starve for lack of adequate food supplies particularly if the weather doesn't allow them to forage.

 Check for eggs and laying queen. This should be done on a warm day. Check the queen's laying pattern. If it is scattered and sporadic, she may be getting old, tired, and ready to retire.

 Check for Varroa mite levels by performing a sugar shake, alcohol wash, or 24-hour mite drop count. Treat as necessary, Formic Pro is a good option in spring. Oxalic acid vapor will not be effective at this time.

 By the end of April, you should be looking for swarm cells and have a plan for what you are going to do if you find them.

 If you are getting nucs or packages make sure that your site and equipment are ready.

## Queen Breeding Locally

Board member Ken Curtis is starting a group dedicated to selectively breeding queen bees to produce a strain of honeybees that are better adapted to our climate, as well as local pollen and nectar sources.

By implementing a queen rearing program we would be able to maintain a supply of queens for club members at a reasonable cost. Doing so would make requeening colonies more feasible. It would also help keep colonies healthy and eliminate unwanted traits.

Contact Ken at [Kenctrts1957@yahoo.com](mailto:Kenctrts1957@yahoo.com) 360-261-2795

## Swarm List

If you want free bees then join the swarm list. All you need is a phone that receives texts and be a member of CBA. When I get a notice of a swarm, I group text everyone on the swarm list with the general location. The first person who texts back that they can quickly respond will get the details. Very few swarms fly before they are rescued when we respond fast. Text Bill at 3604304077 to get your spot on the list.

## 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



## Kalama Anti Pollinator Ordinance

We will be submitting a letter to the Kalama City Council that they reconsider and change ordinance 6.04.100 established in 2005 (preventing beekeeping within the city limits) to allow beekeeping. The CBA would gladly provide a presentation and answer questions.

Honey bees play a vital role in Washington's agricultural industry. Pollinators are critical to our community, state, and our Nation's economy, food security, and environmental health. All of us know that honey bees have successfully and safely been kept in urban and sub-urban settings. Honey bees contribute to the success of individual and community gardens and pollinate fruit and nut trees in yards. Who doesn't love honey bees?

If you would like to read our submission contact Bill or John.



# Drift in Honey Bees

by John Holmes

Drifting is what happens when bees return to colonies that are not their parental colony. It is a characteristic of managed beekeeping. Honey bees have amazing navigation skills and sensory ability that allow them to locate home. Returning to an apiary, bees have a greater challenge if hives are placed close together, entrances face the same direction. The hives look the same, and the clueing pheromones emitted from the hives can be mixed by air currents.



A study by Currie and Jay (1991) looking at drifting behavior of drones in commercial apiaries showed high drifting of drones from the parent colony (50%) and that 21% of drones drifted more than once. The use of colored entrances, offset entrances, or hives laid out in horseshoe formations did not differ drifting significantly from colonies arranged in straight rows. Drifting did decrease with distance between hives spaced greater than 164 ft (50m) and stopped when hives were 492 ft (150m) apart. For beekeepers this indicates, within an apiary, it is likely drones will drift between colonies regardless of attempts to minimizing drifting.

Studies looking at drift in workers have shown that most drifting takes place during the early orientation flights, that workers tend to drift from weak colonies to strong ones, most drifting is to adjacent hives, and although worker drift is common in the apiary it can occur with colonies a half mile distant.

Drifting of queens returning from mating flights usually results in the queens being killed. Gabka (2018) showed less drift occurred when hives were irregularly placed facing different directions and had landmarks in the vicinity.

For the beekeeper, drift cannot be eliminated but can be reduced by:

- Space hives as wide apart as possible, unequal spacing between hives
- Have entrances point in different directions
- Make each hive look unique: different colors or patterns, location (placed next to a landmark like a shed or tree)

Regarding apiary health, drifting bees can carry and spread pathogens and parasites. Since drifting will occur within the apiary, the beekeeper should look at the apiary as a unit. Manage colony health in all hives when one hive shows problems. The drifting of bees from colonies collapsing from varroa was thought to be a prime source of spread. A study by Peck and Seeley (2019) shows instead that the robbing of failing colonies creates the greatest spread of varroa mites.

<https://www.tandfonline.com/doi/abs/10.1080/00218839.2018.1492502?journalCode=tjar20> Drifting of honey bee queens returning from flights, Jakub Gabka, 2018

<https://www.tandfonline.com/doi/abs/10.1080/00218839.1991.11101235> Drifting behavior of drone honey bees (*Apis mellifera* L.) in commercial apiaries, R W Currie and S C Jay, 1991

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0218392> Mite bombs or robber lures? The roles of drifting and robbing in *Varroa destructor* transmission from collapsing honey bee colonies to their neighbors, D.T. Peck and T.D. Seeley, 2019

## Time to Eliminate Yellowjacket Queens

Yellow jacket workers, drones, and old queens die each fall with the first frosts. The only survivors are the newly fertilized females. They spend the winter hibernating in underground holes, brush and compost piles, hollow logs, tree cavities and firewood piles. They begin their overwintering around November and will stay there until the temperatures start to become spring-like. Then the queens, which are about 3/4 of an inch long, emerge, feed on nectar, and then find a nest-site. Once she has selected a location, she begins tearing strips of wood fiber and mixing that with saliva to build her nest. After she has built a small nest she lays her first batch of eggs. When they hatch, she must feed the larvae a protein source. That's when she starts looking for meat, frequently other insects. But, she must also feed herself with a sugar source.

To prevent yellowjacket nests from ever being established, you eliminate the queens. The total number of queens available to start a nest in the spring is fixed. They can't make any more. Every queen caught now while foraging means fewer yellowjackets will be around to torment you during your summer outdoor activities, or to attack your bees in the fall. You should kill every spring yellowjacket you see, but you should also place bait traps around your property. Pictured at right is a Rescue trap which has a single chamber and a single scent attractant. A cotton ball sits in a cavity at the bottom with a pheromone scent which attracts yellow jackets and their queens. The attractant is Heptyl Butyrate (HB) which is a chemical found in rotting apples and pears. The scent lasts several weeks in spring but has a shorter life as the weather warms. Refills can be purchased at hardware, big box, and other stores. This trap works well but unfortunately only on Western Yellowjackets. We also have Common and Aerial yellowjackets, and bald-faced hornets which are also yellowjackets. You can improve the odds of catching queens or workers by adding a little cooked chicken. But since Yellowjackets do not eat rotting meat, the bait should be changed out every few days. In a 2017 study Dangsheng Liang and Jose E. Pietri found that combining chicken extract and HB in the same trap was not effective. But, hanging 2 traps on different branches of the same tree, one with HB and the other with chicken extract, they caught significantly more YJ's. Your best results would occur when you use 2 rescue traps 6 to 8 feet apart, one with the HB attractant that comes with the trap and the other with cooked chicken. If I only deployed a single trap, then I would use the attractant without any meat.



Rescue has another model called the "WHY" which has 2 compartments. The bottom is just a smaller version of the trap above and is baited with heptyl butyrate. The top section uses multiple attractants. First a small cartridge of methyl butanol is opened and snapped in place at the top of the chamber. Then the bottom of the upper chamber is filled with a solution of acetic acid (vinegar strength) and water. Both the top cartridge and the acetic acid water additive have additional proprietary ingredients which could be chemicals like isobutanol that have been shown to attract common and aerial yellowjackets. This trap theoretically would do it all. However, I don't know of a study that shows the method works. It is possible that all the scents emanating and combining from that trap might be confusing and less effective than 2 separate traps spatially partitioned. It is a nice idea though and could be highly effective. You should be able to increase your catch by deploying a single chamber Rescue trap loaded with a chicken nugget hung about six feet away. But remember to change meat regularly. WHY trap refills are more expensive, but a multi yellowjacket specie catch may very well be worth it. Bill



## Out in the Bee Yard

Bill Holmes

### Dream Swarm Catcher

Swarm season is coming. You can put up bait hives to try and lure a foreigner to your apiary, but you might want to keep the swarms from your own hives too. One way to do that is by using a Russian Scion. This technique essentially applies the principle of the bait hive to the bivouac location. A tallish pole (perhaps ten feet high) is placed not far in front of the hives. On top of the pole is hung the scion. While there are elaborate designs, it need only be a simple roof about a foot square to provide a bit of shelter to the lure beneath it. The lure can be a short, vertical length of wood covered burlap then coated with beeswax. Or even an old frame could work. If you have a handy tree, toss a rope over a branch then pull the scion up. It's best that it is not swinging in the breeze. There are examples on YouTube. Do this and don't wait for them to fly too high or get buried in the brush, or set up on your neighbors swing set.



### Fermented Honey

I got my order of Nashville fermented honey. If you remember I mentioned it in the March newsletter. It actually has a nice flavor. And it's got some heat. Tastes great on chicken and tri-tip which are the only things I've tried it on. It's slightly runny, most likely they have to add some water for the fermentation process. But how they control that and add the heat is not on their website. If you're into fermentation and want to experiment, it might be a fun project. But, you may never get it just right.

### April Inspections

My most important inspections are in April. On the first warm day, I will gather my tools, smoker, and something to drink since I'll be out there for a couple hours and get started. I have hive bodies, lids, nuc boxes, stands, frames drawn and blank, and other sudden needs nearby in storage. In March I made a quicker trip through the hives so I know that they all have laying queens with great patterns, and honey stores were ample. So now I will be looking at making decisions on reversing hive bodies and replacing old comb with new blank foundation. I have always used wax foundation, but I tired of stringing wires, so my new frames will be black plastic which allegedly has a heavy wax coating. Just snap and go. A plus is that it's easier to see eggs in the bottom of cells with the black background. They can also be scraped down and reused someday.

I have another goal which is to test 9 frames in my 10 frame boxes. My bees frequently propolize and wax up any space they can, making removing the first frame difficult. Sometimes I'm close to tearing the top bar off as I pry away and then I roll a bunch of bees on the way out and on the way back in. I noticed that 8 frame boxes for some reason have more empty space when all the frames are loaded, so I thought why not go to 9 frames, then I'll have room to slide one over for easy removal. There's two ways to do this. I can space all 9 frames evenly, or I can push them together and have some space on both sides. I don't know which would work out the best so my plan is to try this on 2 hives and try both methods to see which, if any, placement is best. Another benefit is reducing the weight of the box by 8-10%. Bill

## Oxalic Acid; Exemption From the Requirement of a Tolerance

*Based on the lack of toxicity and the fact that residues will be below and indistinguishable from naturally occurring oxalic acid, EPA concludes that there is a reasonable certainty that no harm to the general U.S. population or any population subgroup, including infants and children, will result from aggregate exposure when considering dietary exposure and all other non-occupational sources of pesticide exposure. Accordingly, EPA finds that exempting residues of oxalic acid from the requirement of a tolerance will be safe.*

Last month I said we could now use Oxalic acid with supers installed based on the above. This is not correct. Although it states that oxalic acid would not be expected to be found at amounts above background levels, it does not change the label restriction. What?, you say. The key to the above is the word “tolerance”. The FDA manages human health by enforcing “food tolerances”. The exemption above means the FDA will no longer test honey for the presence of oxalic acid.

The EPA is concerned about how pesticides are used (not just how much ends up on final food products), which is why they enforce pesticide label restrictions. A pesticide label describes many things such as what should be worn while applying the pesticide, if it should not be mixed with other pesticides, and how it should be applied. Pesticide labels are written by the manufacturer of the pesticide and approved by the EPA. The label for oxalic acid currently states “Do not use when honey supers are in place.” As long as this label is in place, it is the law, regardless of FDA tolerance rulings.

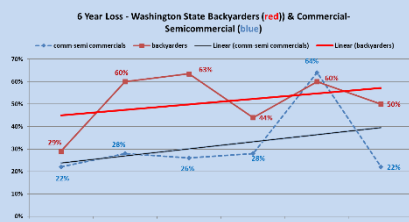
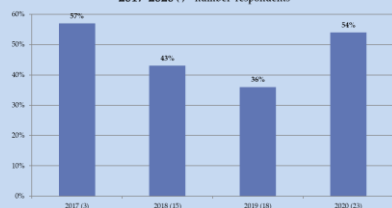
The Registration Division of the EPA requested that Health Effects Division (HED) review a label amendment request for the use of oxalic acid in beehives. The HED released their findings on November 19, 2020. The amended use requests to modify the directions of use so that oxalic acid dihydrate may be applied when the honey supers are present on the hive. The HED findings document provided the results and is based on detailed considerations. They concluded that there is no anticipated occupational handler, dietary, or aggregate risks that would preclude approval of the proposed label amendment use of oxalic acid in beehives.

So, there is an application to change the label. There does not appear to be any reason why it should not be changed, and yet it has not been changed. It’s also difficult to know if it will ever be changed without a pesticide manufacturer leading the charge. There isn’t any money to be had by anyone if the label is changed, thus change seems unlikely, but possible, I’m hoping. Bill

## The 12th annual Pacific Northwest Honey Bee Loss Survey

<https://pnwhoneybeesurvey.com/survey/> is open and will be available until May 1st. Please consider downloading and filling out the note sheet to aid in quick survey entry. Many have found that this simple resource has been key to have on hand in the bee yard throughout the year not only to track items but to remind of alternative bee husbandry options. **I would like to see every CBA member who had hives in 2020 to participate in the survey.**

Figure 4. Cowlitz loss history  
2017-2020 ( ) = number respondents





## Beekeeping in the Urban/Suburban Setting

Mid-Atlantic Apicultural Research and Extension Consortium

Since legal problems with bees most often occur in cities and suburbs, beekeepers should manage bees so that they do not bother neighbors. You can take several precautions to decrease the chances of your colonies becoming a public nuisance.

Maintaining gentle colonies is imperative in highly populated areas. Keeping colonies with bees that try to sting each time they are examined, or that consistently hover around the bee veil even after the colony is closed, is not advisable in the urban setting. Selecting hybrid strains that have been bred for gentleness and requeening on a regular schedule will certainly help. If a colony becomes too defensive, requeening with a new queen will likely change colony temperament in a month or so.

Providing a source of water near the hives will stop a lot of unnecessary complaints. Otherwise, the bees may get their water from the neighbor's swimming pool, dripping water faucet, birdbath, children's wading pool, or hanging wash. Once they have become accustomed to a watering place, they will continue to use it throughout the season, and correcting problems after they develop is not always possible short of moving the bees.

Most colonies have a basic flight pattern as they leave and return to the hive. People and animals passing through this flight path could be stung. Bees also spot cars, clothing, and buildings in the vicinity of the hive by releasing their body waste in flight. Spotting from a single colony is generally not serious, but several colonies flying in one direction may make a car or house unsightly in a short time. If possible, do not allow hives to face children's play areas, neighbors' clotheslines, houses, and so forth. Planting a hedge (vegetative corral) or building a fence at least 6 feet high forces the bees to fly above head level and thus reduces the chance of encounters with pedestrians. Fences and hedges also keep colonies out of view, which helps reduce vandalism and concern by the neighbors who might have unfounded, but to them very real, fears related to bee stings.

When manipulating hives, keep your neighbors in mind. Weather and time of day influence the disposition of a colony. Colonies kept in the shade tend to be more defensive. Work the bees on warm, sunny days, when the field force will be actively foraging. Avoid early morning and late evening manipulations if possible. Use smoke efficiently and work carefully and slowly to help prevent defensive behaviors. During a nectar dearth, keep robbing at a minimum. Robbing stimulates defensive behavior. Keep examination time to a minimum and make sure honey supers and frames not being inspected are covered. Top entrances should be avoided in close neighborhoods during the summer season. Whenever a hive with a top entrance is opened and the supers moved, hundreds of bees will be flying around confused because their entrance is gone.

Swarming bees can be a major concern for neighbors. Even though swarming bees are quite gentle and seldom inclined to sting, the presence of a swarm in the neighborhood tends to excite people, and your apiary, rightly or wrongly, will likely be identified as the source of the swarm. Having sufficient equipment to manage your colonies and reduce swarming is a must.

Part of being an urban beekeeper is good public relations. Beekeepers who permit their bees to become nuisances force communities to institute restrictive ordinances that are detrimental to the beekeeping industry. Do not keep more colonies in the backyard than the area forage can support or more than you have time to care for adequately. Giving the neighbors an occasional jar of honey will also sweeten relations. Only a very small number of communities prohibit keeping bees. In most instances, violation of an ordinance or keeping bees in a negligent manner usually means moving the bees to another location.





The **Western Apicultural Society** is providing, free, monthly, **Zoom Webinars**. Past presentations in Dec 2020, Jan and Feb 2021 are available on YouTube.com, search: western apicultural society. The April webinar hasn't been listed on their website but they are held towards the end of the month. Register at <https://www.westernapiculturalsociety.org/events-1>

CBA has a **New Facebook Group** and it needs you. Thanks to new member Nate for getting it set up. We think this will be helpful for discussions and questions about beekeeping. You can get several perspectives and then match up the answers to your goals. Find us and join at <https://www.facebook.com/groups/457379328804524>

Cowlitz Beekeepers Association  
Monthly Zoom Meeting  
March 18, 2021

Meeting came to order at 7:04 p.m.  
38 in attendance

**Nuc Sales** - Nucs tentative delivery is Saturday April 17, 2021. Payment of nuc orders need to arrive no later than March 31, 2021.

The City of **Kalama ordinance** states it is illegal to have honey bee hives within the city limits. Letters are being sent to the city council letting the city officials know how beneficial honey bees are to our environment.

We need to rebuild our **Facebook** page and need help with it. If you have tech skills and would like to help please contact Bill Holmes.

**Guest Speaker** for our meeting tonight was Dr. Dewey Caron. He stated that the survey is open to fill out on 'How did your bees do over winter?' Dewey has 3 books available to purchase if you are interested. Honey Bee Biology, \$50; The Complete Bee Handbook, \$17; A Field Guide to Honey Bees, \$15. You can contact him at [dmcaron@udel.edu](mailto:dmcaron@udel.edu) to order. There was a question-and-answer time after his presentation.

Our guest for April 15, 2021 will be Charlie Vanden Heuvel.

Meeting adjourned at 9:23 p.m.

Minutes taken by, Zenobia Scott, Secretary