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

July 2021

Issue 7

Next Meeting:

Where: At the Sons of Norway building 224 Catlin St. Kelso WA or anywhere worldwide on your computer via Zoom

When: July 21, 2021, 7:00 PM

Speaker: Joy Bochsler

Topic: Varroa Mites and Honey Bound Hives

If you live in Cowlitz county or the surrounding area and find honeybees 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:

Ken Curtis, President(360) 261-2795 or cowlitzbeekeepers@gmail.com

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Ray Davis, Trustee (360) 431-2882

Dave Scott, Trustee (360) 425-2314

Kathy Scott, Trustee(360) 601-0393

Elizabeth Peters, Trustee (360) 241-6954

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

Monthly Raffle Prizes

Monthly raffle prizes are often offered to in-person participants at the monthly Cowlitz Beekeepers meeting. This month's raffle prizes include a decoration donated by Barbara Skreen. If you have something you would like to donate as a raffle prize feel free to bring them to ea monthly meeting.



There will also be a roll of burlap offered as a raffle prize that was donated to the club by a club member unknown to me.



July 5, 2022 Cowlitz Beekeeper's Association 4th of July Parade 2022 We've had another fun-filled, exciting 4th of July parade entry! Thank you's going out to Norm Sturdevandt, Scott Stulgis, Vicky Turek, and Terri Horness for helping to decorate our float. Thank you Pete Cassell for the Bit O'Honey candy donation. I have to apologize. Someone else in our club donated candy and for the life of me I can't remember who it was. (Please reach out to me so we can recognize your generosity) A special thank you to David and Zenobia Scott for letting us use their trailer once again, and John Horness for being our pilot! And thank you Eric Horness for moving those cones! LOL We can't forget to thank our walkers - Bill and Sue Holmes, Ken Curtis, his niece, Meagan, Sue Brookfield, Jill Matta, and Vicki Turek. The Go Forth Parade Committee will announce the winners of each category sometime this week. I'll be able to let you all know if we won first place again for best decorated float at our next meeting. Until next year...... Submitted by Kathy Scott



Bees and Water

Ken Curtis

There are several reasons a colony of honeybees need water. Bees use water to dilute honey for feeding brood, to cool the nest on hot days, and in dry climates to humidify the nest to prevent desiccation of the brood. Nectar is mostly water (35 – 85%) so much of a colonies water needs are often met by the collection of nectar. However, a colony must also collect pure water, because bees do not store a large amount of water within the hive. During cold weather or a dearth of nectar-bearing flowers nectar collection is meager. Hot weather creates a need for evaporative cooling. A high demand for brood food may also create a need for water. Another need for water is

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.

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

consumption by nurse bees when feeding brood. Nurse bees feed young larvae royal jelly which is approximately 67% water for the first three days. After the third day Royal Jelly is supplemented with honey and pollen. Nurse bees need more water than is available in nectar alone when brood rearing is intensive. Water is collected by foragers referred to as water foragers. The water is distributed throughout the hive and in cells containing eggs and larvae. Fanning is then used to evaporate the water, as is regurgitation and evaporation on the tongue. Successful brood rearing requires at least 55% humidity. However, at 90 to 95% a much higher number of eggs hatch successfully. In summary bees need water for multiple reasons. When the internal temperature of a hive becomes too hot evaporation is used to cool the hive, during periods of extensive brood rearing high humidity is necessary for a higher number of eggs to hatch, and nurse bees use water to feed young larvae.

Bee Culture February 2018 Pages 27 – 29.

Feeding Bees in Summer

Ken Curtis

Why feed bees in the summer? In most cases you wouldn't feed bees in the summer since they are foraging available resources and making their own honey. Extreme summer heat or nectar dearth (a shortage of nectar producing flowers) may make it necessary to feed bees sugar syrup. It is likely that if you installed a nuc or package bees in the spring you provided sugar syrup and are prepared to feed in the fall before the winter death. Fall feeding may begin as early as late August or early September depending on weather conditions. Although these are summer months, they are part of fall feeding schedule, and could require 2 parts sugar to 1 part water by weight to promote successful overwintering. Summer feeding consists of a 1 to 1 sugar syrup to boost hydration and stimulate a natural source of nectar. During your bees first summer the objective is to ensure optimal conditions to ensure a healthy colony. It is not likely that you will collect honey in the first year as the bees will need their honey stores for winter. Check your hive before summer feeding If your bees are building comb and storing honey and pollen, they probably don't need supplemental feeding. However, if your colony is weak, they are not building comb, or honey stores are low summer feeding may be necessary. Likewise, if you recover a swarm, it may be necessary to help the bees build comb, store food for the winter, and feed brood. During the summer be sure to provide a source of water, especially during drought conditions. Stop feeding your bees when natural nectar flow and honey production resumes.

Identifying summer nectar dearth: When summer drought, pests, or fires kill off flowers or plants that provide forage bees face a severe nectar dearth. Likewise, temperatures above 100 degrees F. may prevent bees from leaving the hive to collect nectar or pollen. These conditions may result in a shortage of resources threatening the survival of honeybee colonies. Watch for the following signs to determine if your bees are experiencing a nectar dearth, which could make supplemental feeding is needed. **Listen to the bees:** If your bees become loud and/or begin showing signs of defensiveness or aggressive behavior it could be because they are responding to food shortages. **Watch for robbers:**

Robber bees from nearby hives may also be an indicator that there is a food shortage. **Observe your foragers:** Without plentiful flowers providing nectar and pollen bees may meander instead of flying in straight lines, revisit flowers, or their behavior is not normal they may be reacting to a food shortage.

The recipe for 1:1 syrup: Mix equal parts of white granulated sugar and hot water. Sugar dissolves quickly in water that is about 140°F. Do not use boiling water. You do not want the sugar to caramelize.

- Only use white granulated cane or beet sugar anything else, even raw sugars, often contain indigestible particle that could cause harm to bees.
- You can measure by weight (one pound of sugar to one pound of water) or by volume (one cup of sugar to one
 cup of water or gallon to gallon). The sugar water consistency will vary slightly, but the bees won't care.
- When mixing sugar in a large container such as a five-gallon bucket put the water in first. Heavy damp sugar is hard to mix. Also mix in small amounts of sugar at a time. Example: 3 gallons of water to 25 lbs. sugar add 5 gallons of sugar at a time.

How to prevent robbing during summer feeding:

Sugar syrup will likely attract robber bees, but you can prevent invading and reduce robbing by:

- Using in-hive feeders
- Cleaning up any syrup spills on the ground and sides of hives immediately
- Installing a robber screen or entrance reducer
- Feeding in the evening, after most foragers hive returned to the hives

Successful beekeeping requires knowing when to supplement your colonies food and when to let the bees provide for themselves. When bees face a summer dearth or scorching heats it may be beneficial to supplement their intake with 1:1 syrup.

Betterbee: https://www.betterbee.com/instructions-and-resources/summer-bee-feeding.asp

July Checklist

- Make sure your bees have a good supply of water. Use small pans or if you have many hives, use a child's swimming pool and float wood or pieces of carpet on the water for the bees to stand on when hydrating.
- Make sure your hives have adequate ventilation.
- By the end of July, you should be ready to harvest honey. If this seems early, keep in mind that colonies don't gain much harvestable weight after the end of the month.
- Importantly, your bees will fare much better in winter if you complete your Varroa mite treatments before mid-August, and many treatments cannot be used with honey supers on the colony.

Zenobia Scott, Secretary

Cowlitz Beekeepers Association
Monthly Meeting
June 16, 2022
Meeting came to order at 7:05 p.m.
In attendance: in person 23, via Zoom 6
Our guest speaker was Ted McFall of McFall Bee Yard in Curtis, WA.
Ted talked about the Giant Asian Murder Hornet
If you have questions or would like to set up Giant Asian Murder Hornet traps contact Public Reporting at: agr.wa.gov/hornets
call 1-800-443-6684
e-mail hornets@agr.wa.gov
The 4th of July Parade is coming up. Need volunteers to walk or ride in the parade, also more Bit O' Honey candy to hand out at the parade. Decorating the float will be the day before the parade.
Cowlitz County Fair is July 27th through the 30th, from 11 a.m. to 11 p.m. Setup will be the 26th beginning at 9 a.m. Tear down will be the 31st. Signup to man the booth will be at our meeting on the 21st. This year's theme is "Let the Good Times Grow".
Meeting adjourned at 8:39 p.m.
Minutes taken by,

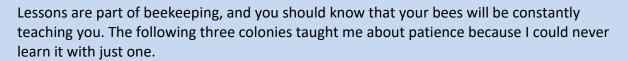
Out in the Bee Yard

Bill Holmes

The blackberries have finally started blooming and bees are collecting, transferring, and ripening it in my supers. I was beginning to wonder, and still do, what kind of harvest I would have this year. The good news, I believe, is the occasional rain we had in June and the promise of early July showers will bring an explosion of summer wildflowers we seldom experience. I don't know if that will happen, but I can imagine harvesting honey whose flavor is like nothing I've had before.

The eleven colonies I brought through winter were thriving through April. Then early May rain kept my bees locked down and I nearly lost 5 of them to starvation. I was greeted with piles of dead bees on the ground and an inch deep mass of lifeless bodies on the bottom board. I never thought they could run out of food in May

There were not a lot of bees in those 5 hives but there was a queen in each and although none were laying, there was at least hope. I fed them for 2 weeks which was enough to get them healthy and building. But, I was only going to have 4 or 5 strong colonies going into the flow unless there is a remarkable turnaround in those weak colonies. I am always hopeful. There is no hope, however, for my apples, pears, and plums which failed to set any fruit.





The first was a nuc I built on April 24 with 5 frames of honey, pollen, eggs, and larvae, essentially a walk away split. On May 15 I noted with disappointment there wasn't even evidence of queen cells attempted nor was a queen found. Had they begun queen production with either an egg or a just hatched larvae, then that queen should have emerged May 7-10 and be laying around May 20th. On May 31 I didn't see eggs and after a deliberate search no queen was located. At that point I gave up on them but would let them live out their lives in their nuc until they just dwindled away. Then on June 20th I found eggs, single eggs right in the bottom center of cells and a few that hatched.

The second colony was my long hive who had apparently swarmed leaving because on May 17^{th} I saw several uncapped queen cells and a tiny virgin queen. I don't know when she emerged but if it was that day then I would expect her to be laying by May 29^{th} or sooner. Virgins have a window of time that the must mate or forever be barren. That window does not appear to be well defined but I have seen estimates of 3 to 4 weeks after emergence. Our weather has not been conducive to mating. Her window would close June 7 – 14. On May 31 she was still a very tiny virgin. This colony also was checked on June 20^{th} and it too a laying queen who had just started laying.

The third colony was a swarm that I hived on May 10 I hived a swarm but did not go through it until May 16th. I saw a queen and she looked normal but had not started laying. On May 31 I didn't see a queen and there was still no eggs or larvae. This was 3 weeks after I captured them. So, this one also was left alone to collapse but on June 20th they also had eggs and larvae but no capped at that time. That was nearly 6 weeks after I put them in a box.

All three of these colonies should not have moved from terminal to thriving but they did. And if I didn't already have all the colonies I wanted and had time for, then I would have likely added frames of eggs/larvae or having a queen shipped in. Efforts that would have taken from my other colonies or my wallet and in the end not worked. Just know that our colonies get healthy on their schedule not ours.

Supers

To queen excluder or not is the question. Last year I put them on all my hives and had a good honey harvest. This year I started out using them only to find the bees were working them lightly while backfilling the brood nest in the deeps with honey. That could lead to swarming. So I removed the excluders and the bees gratefully moved into the supers and have been filling them out nicely. If I see that there is brood in the supers once I get closer to harvest day, I can make sure the queen is down below and add the excluder. Then as the brood emerges the cells can be filled with honey and all should be good.

I almost always add supers before they need them. If a super is filled with bees and 4 or 5 frames have ripening honey then I'll add another well before they begin capping. I believe in motivation.

Varroa

It's time to start thinking about how you're managing mites. August is the best time to deal a blow to mites since winter bees will start being raised in September. Winter bees have enlarged fat bodies and live 4 to 6 months through the winter. If they are weak then you may lose your hive in January or February. Almost made it is never a good thing. Last year I used Apiguard which is a thymol (thyme extract) based treatment. I was pleased with the results but I read this winter that another thymol based product ApiLife Var produces better results at lower temperatures. Apiguard which is safe and effective at up 105 degrees may still be the best choice depending on when you start treatment. A tub is placed in the hive for 2 weeks then replace with a second tub for a total of 4 weeks. As the days start going below 80 degrees ApiLife Var can be more effective. Apilife VAR is a formulation of Thymol, Eucalytol, Menthol and Camphor. Wafers are place in the hive and replaced after 1 week for a total of 3 treatments lasting about 21 days. ApiLife Var is available readily but at only a limited number of suppliers. I just bought a 10 pack which can treat 6 hives for \$69.95 plus \$15 shipping from Meyer bees. I also purchased Apiguard from them. Apiguard is a little cheaper and more widely available. As with any mite treatment there are temperature and hive conditions that will determine how effective they will be and the intensity of side effects. The two thymol products that I will be using this year may not be the best choice for your colonies. Do some reading and get prepared, Formic Pro or Apivar may be a good product for you. I would avoid using oxalic acid as a late summer treatment.

Cell Groups

CBA members should all know that you are assigned a geographic cell group. We have 7 areas, and each has a leader. These are your neighbors who have bees and can answer questions, share ideas, and help each other. They are about giving and receiving. During covid restrictions getting together was not possible. I'm the leader in the Far West and we had our first meeting in June. Not a large turn out but it was still nice. Robert Norris in the North cell invited his group over, but the response was disappointing. The groups are especially important for our new beekeepers. If you are experienced, then we need you to help make beginners successful. I don't have activity reports from the other groups. If you are unsure of your group and would like to know who your leader is then send me an email and I can get you in contact with them. Contact Bill at cowlitzbeekeepers@gmail.com