

Bee Receptive

Cowlitz Beekeepers Association Newsletter

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

Next Meeting:

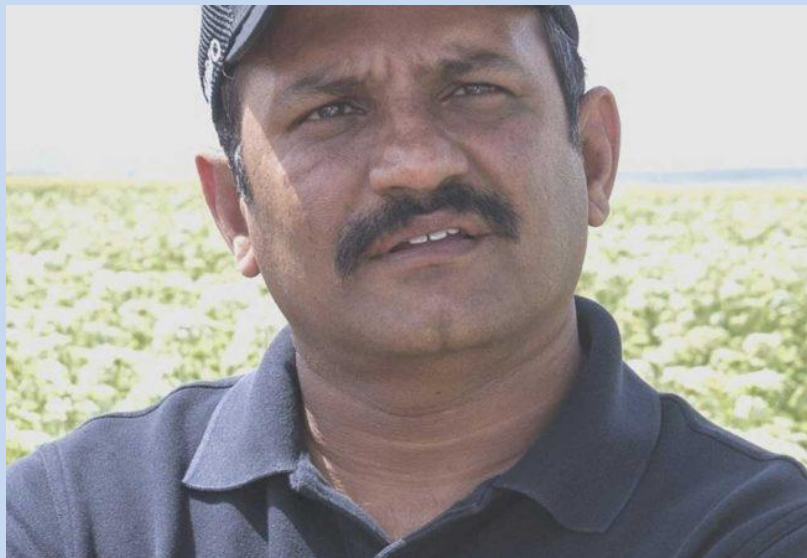
Where: Nearly any place Via Zoom

When: December 16, 2021, 7:00 PM

Speaker: Dr. Ramesh Sagili

Topic: Honey Bee Nutrition – 2021 Research Results.

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

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

Dr. **Ramesh Sagili** is an Associate Professor in the Department of Horticulture at Oregon State University. He obtained his PhD in Entomology from Texas A&M University in 2007 specializing in honey bee research. His primary research focus is honey bee health, nutrition, and pollination. Ramesh initiated the creation of Oregon Master Beekeeper Program and chaired the Oregon Governor's Task Force on Pollinator Health. His research program addresses both basic and applied questions to improve honey bee health and nutrition, and hence majority of his research projects are collaborative efforts involving stakeholders (beekeepers and growers). He has authored several important research and extension publications including the popular extension publication and app titled "How to reduce bee poisoning from pesticides" that is being used by many beekeepers, growers and pesticide consultants/applicators in the country. He has received several awards including the Entomological Society of America's Pacific Branch Research Award, Eastern Apicultural Society's Outstanding Research Award and OSU Outreach and Engagement Award.

2022 Officers and Trustees

President: John Holmes

Vice President: Ken Curtis

Treasurer: Barbara Skreen

Secretary: Zenobia Scott

Trustees: David Scott

Kathy Scott

Ray Davis

Elizabeth Peters

The last question on the election ballot was: **What would you like to see CBA accomplish in 2022. Could be educational, outreach, or anything.** The following responses were received and will be discussed at the next board meeting.

- Raise queen bees to offer club members at a reasonable cost
- Buy equipment for bee keeping to loan.
- Continue the option of zoom meetings even when we can go in person in the future. It allows for the recording of speakers for a later viewing and keeps costs down for those who live farther away.
- In person meetings! Maybe a larger presence in the area so more people know to contact us (rather than other friends) for swarms and bee questions.
- Keep up the fantastic information and lectures
- Just keep the members informed about what is happening and information that will help them as beekeepers.
- In person meetings when it is deemed safe to do so.
- Return to in person meetings :)
- Every meeting be in person up close and personal. Doing a fantastic job so far for the club. Maybe, since it came up recently in discussion at the end of the zoom meeting, some specific queen rearing as a group in the club, keying in on maybe on "successful" grafting.
- I would like to see more educational possibly in person hive inspections. Anything to help over winter bees.
- Mentoring
- Continue the education and fellowship.

Thank you for your responses!

Monthly Meetings

There is a very strong possibility that our January 2022 meeting will be both in person and on Zoom. Those that would like to get together will assemble at the Sons of Norway in West Kelso and those that enjoy not traveling can stay home and participate via Zoom. I'm confident it might even go smoothly. There may be a confirming announcement at our December Zoom meeting but if not, watch for the January newsletter.



December's meeting will be exclusively on Zoom and I encourage you to join us. All you need is a computer or smartphone connected to the internet. Click the link I will send out a few days before the next meeting.

Cowlitz Beekeepers Association

Monthly Zoom Meeting

November 18, 2021

Meeting came to order at 7:00 p.m.

There were 28 in attendance.

Christine Kurtz was our guest speaker from Sonoma County, California. She talked on Decoding Monitoring Boards. She was very informative. Had a question-and-answer time afterwards.

Our next Zoom meeting will be December 16th. We will not be having a Christmas Party this year due to COVID restrictions.

We are voting for new officers and trustees for the coming year. Ballots will be sent out via e-mail to vote. Voting will be held the week after our meeting. Results will be posted in our Monthly Newsletter for December.

January we plan on having a hybrid meeting. We will meet at The Sons of Norway and also have Zoom for those who are not able to attend.

We will have a nuc program this coming spring. More information to follow for those interested in purchasing one or more nucs.

Bee School will be held on Mondays starting January 31, 2022 and run through February 21, 2022. Registration is through WSU Extension Office. Once registered you will receive a workbook through WASBA. When the course is completed you will receive a certificate of completion. The instructors will be our own John Holmes and Ken Curtis!

Had a general bee club question and answer time.

Meeting adjourned at 9:05 p.m.

Minutes taken by Zenobia Scott, Secretary

November's Zoom meeting featured speaker Christine Kurtz. She was willing to look at photos of your bottom of the hive detritus or just answer questions. Her email is petalumabeelady@yahoo.com

**PennState Extension**

Webinars: Information on pollination and bees, including gardening for native pollinators, such as butterflies, hummingbirds and beneficial insects like moths and wasps. Tips on bee health, Beekeeping 101, and pollination requirements for fruits and nuts. Generally free. <https://extension.psu.edu/trees-lawns-and-landscaping/home-gardening/pollination-and-bees/shopby/webinars>

The Buzz on Nucleus Colonies

by John Holmes

With winter fast approaching I would like to suggest as a winter project. Buy or build some nucleus hives and have them available for spring. A nucleus colony is a small colony consisting of a laying queen, workers, bees in all stages of development, as well as stored food. Housed in small hives having from two to five frames they are commonly called “Nucs”. For the beekeeper they are a good management tool serving many functions.



- Colony increase - used to increase apiary size, replace colony loss, or generate income from sale.
- Swarm control – the old queen and a portion her colony can be used to create a nuc and a false swarm. Also frames from crowded hives can be removed and used to make nucs. An observation: bees joined from two hives may fight, while joining bees from three or more usually do not.
- Righting a queenless colony – using a double screen board a nuc can be used to introduce a new queen to a colony that has a drone laying queen or laying worker.

In making a nucleus colony some factors to consider include:

- Ensure there are enough bees to cover the brood. If a nuc is made up and kept in the same apiary the flying bees will usually go back to their original site, possibly leaving the nuc short of bees to look after the brood. The usual method is to ensure that many of the adult bees haven't flown before. Bees are shaken off the frame into a tub, flying bees will depart and the non-flying bees are poured into the nuc.
- Using sealed brood requires less bees to maintain and will expand the colony size quickly.
- Make sure there is adequate food stores to last until next inspection. It is not recommended to feed the nuc initially, it may trigger robbing.
- Entrance opening needs to be small to allow the colony to defend itself.
- The nucs should be placed out of direct sun to prevent overheating.
- Make sure there is room to expand. Use drawn comb not foundation.
- Ensure there is a queen, or if not a queen cell, eggs, or young larvae from which to raise one.

Randy Oliver has developed a program to determine colony buildup, it allows the input of variables and can give insight as to what size and how you want to start your nucs.

<https://scientificbeekeeping.com/starting-colony-buildup-calculator/>

Oregon State University has a publication on overwintering nucleus colonies.

https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw682_2.pdf

Out in the Bee Yard

Bill Holmes



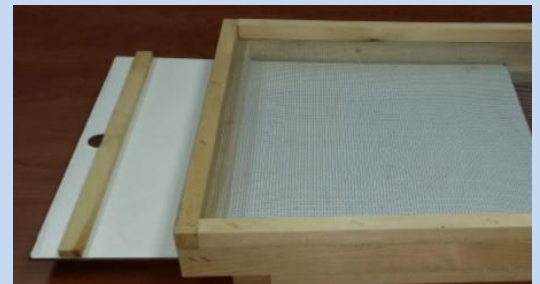
Sunday November 28th was 58 degrees and dry. I hope you all took the opportunity to go watch the action in the apiary. I love seeing how much the bees enjoy getting out for a stretch and checking out the plant world for food. I even had one bee tire of my gaze and chase me out of there, but I was leaving anyway.

On Saturday my dog began barking at the front window. My investigation came up empty as nothing was outside that should arouse her. That's when I noticed she was looking up not out. Lifting my eyes I discovered a yellow jacket walking around at the top of the window inside the house. She has never barked at an insect before, but she was definitely agitated and did not calm down until I was able to smack it and show her the dead body. Now I'm wondering if she can perform the duties of a yellow jacket alert dog and find nests to be exterminated.

Today November 30th it was 52 degrees and misty when I went out to see what's up with the bees. Turns out, not much. Out of 11 hives, one was going strong with bees all over the reduced entrance and many more coming and going. I didn't check their legs for pollen, I should have but my mind was elsewhere, I guess. The other 10 completely inactive. It is odd and interesting how different they can be sometimes. These bees have not seen a purchased queen in over 6 years, they just replace and breed their queen with the local drone population usually after swarming but occasionally through supercedure.

Tomorrow is December and it's time to start those winter projects. We should normally be looking at our woodenware routinely for rot, cracking, or prying damage. Bottom boards can easily get soft spots from rotten wood which could then topple the entire hive. And if you have your hives close together you could be looking at a domino effect especially if supers are on.

I've got 4 woodenware projects I need to get started. The first though not chronologically is to redo how my mite drop check boards are installed. After listening to Christine Kurtz at our November Zoom meeting I decided to make some changes. First step is to get some blank plasticized corrugated sign board. For this I turned to ebay where I could buy 10 sheets of 24 x 18-inch 4mm coroplast for \$28 including shipping. The image at right shows what I'm planning. The wooden



piece will allow me to close the space at the back of my bottom board to air drafts and insects that may want to glean the various droppings. The access at the back is about ½" so I won't need but thin piece fill wood. Then I'll add the hole to the extra sign board so I can easily pull it out. Screen bottom boards were first used back in 1853 before the widespread adoption of the Langstroth removable frame hive. But at that time, they were trying to control wax moths. That didn't work out and they disappeared from use. Then they popped up again as a possible varroa control. Since mites fall off bees and drop through the screen never to return it was thought that could reduce mite levels to mere nuisance levels. But like with wax moths it just didn't work. Not enough mites fall off to make any difference in their population. Many folks went back to solid bottom boards as a result. But others found they still had benefits in seeing the effect of mite treatments, and in reading the everyday dropping of debris to form an educated opinion of what is going on above. That's where I am, and I

generally keep them closed most of the time. I don't believe they are necessary for hive ventilation nor humidity control which is why I'm tightening up the cracks with the wooden piece on the coroplast.

Project 2 is just to make a couple screened bottom boards and have them ready if I find problems during that first major inspection in the spring.

Project 3 is an experiment. Lifting full deep boxes and twisting my body to set them down safely is routinely straining my back which is also slow to bounce back from abuse. To that end I've thinking of ways to reduce weight. Going to 8 frame equipment obviously reduces the weight by 20% but requires replacement of every piece of hive woodenware. That choice should have been made when I started this 8 years ago. I could also go to using westerns as brood boxes. That switch would reduce box weight by about 30% and presents a great opportunity. Three western equals two deep brood boxes and appears to be just as adequate for keeping bees alive and robust. Only problem is a plan on how to convert those tall frames filled with honey and brood to shorter ones. Long Langstroths solve the lifting of boxes problem, but honey production is reduced. They are over 4' long with 30 deep frames. Some have developed a way to stack supers on them but with our rain you better have a full roof to cover the box and that would be heavy and complicated I believe. So I'm hoping a shorter long lang will be do the trick. Of course, someone has already thought of it, and I found this unit available on Etsy for \$255. Includes everything you see sans foundation but includes shipping. I believe that is a good price. I bought two 8-foot 1X12 pine boards yesterday for \$65 and that doesn't come close to completing the project. I am very tempted, but I like to build stuff. You can stack 2 10 frame westerns side by side on top of the deeps. It also uses 2 inner covers so when you are inspecting one end you can keep the other side covered. I think it is quite promising and the only drawback I see is that I will need help to move it if that need arises.



Project 4 is nuc building (thank you John for your article). Several years ago, I built 4 nucs. Last year I made 4 hive body only nucs so I could stack them two high if needed and I didn't want to transfer to a deep.

Swarm control is difficult without making splits or at least pulling enough frames to fill a nuc. But that increases the size of the apiary. I usually have 100% winter survival and I want to keep my apiary at 9 hives. I ended up at 11 this year. I'm contemplating making up some nucs and then sell them. That would help to control swarming and at the same time make me wealthy. There's another thing I want to try and that goes back to the driver of project 2, reducing lifting weight. I want to try stacking a nuc 4 deeps high. Two for brood, Two for honey. I'll need to buy 5 frame nuc queen excluders which thankfully are available though you must look around. I might do two of these stacks and deal with the tippiness factor somehow. If I can get 10 deep frames of honey it will be worth it.








It looks like I have enough projects for this month and probably January as well. Bill



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>

BEEKEEPERS CALENDAR OF SEASONAL ACTIVITIES***Different Season, Different Activities*****December***Suggested Activities for Beekeepers in the Coastal range from Washington, Oregon and California...*

-  Add an upper entrance to vent excess moisture.
-  Insulate the top of your hive. Use a quilt board or solid foam board 1”~2” thick.
-  The entrance should also be periodically checked to make sure it is not plugged with dead bees. The undertaker bees don’t carry bodies out very far when it is cold and they can pile up at the entrance.
-  December provides a late-season window of opportunity to deal with the dreaded Varroa mite using oxalic acid.
-  Check hive weight, and if light feed solid sugar.
-  Start planning, building, and reading. Spring will be here soon!
-  Keep entrance small so mice don’t foul your hive. A mouse guard is most effective.

Natural Products May Be Buzzworthy Solutions for Honey Bees' Health

November 29, 2021

United States Department of Agriculture (USDA), Agricultural Research Service (ARS) researchers from the Bee Research Laboratory in Beltsville, Maryland, and collaborators found some natural products' medicinal properties reduced virus levels and improved gut health in honey bees.

Researchers found a significant reduction in virus levels in bees fed raw cacao and hesperidin, a plant chemical commonly found in citrus fruits and other fruits and vegetables.

There were also lower levels of viruses in bees fed chrysin, curcumin and vanillin. Chrysin is a chemical found in honey and various plants such as passionflower and silver linden. Curcumin is produced by plants known for giving turmeric its distinctive color. Vanillin is a chemical compound of the extract of a vanilla bean and major flavor component of vanilla.

The results also showed that some natural products had positive impacts on bees' gut health and immune response.

The 20 natural products used in the study included native extracts and individual compounds known to support immunity, have antiviral or antimicrobial properties, and/or control parasites and pests.

Scientists researched these natural products as possible safer, cost-effective alternatives to antibiotics and synthetic chemicals. Understanding these natural products' effects can also help scientists determine better crops and flowers for bees' diets.

"These results could also inform us on possible, healthier crops and flowers for bees. Bees foraging on crops or non-crop plantings of flowers that provide these benefits could naturally have better health."

In an encouraging sign, more monarch butterflies are migrating to California

CATHERINE GARCIA of The Week

NOVEMBER 29, 2021

More western monarch butterflies are migrating to California for the winter this year, and biologists are cautiously optimistic that this is just the beginning of their resurgence.

In the 1980s and 1990s, the butterflies would head to the coast in droves, with biologists and volunteers counting more than a million every year. Due to pesticide use and habitat loss, the numbers have dwindled — only 30,000 were counted in 2019 and just 2,000 in 2020. Things are looking up in 2021, with more than 100,000 monarchs already counted so far this year.



American bumblebees have disappeared from these 8 states. Now they could face extinction.

Asha C. Gilbert

USA TODAY

Dwindling populations of the American bumblebee and their complete disappearance from eight states has led to a call for the bee to be placed under the Endangered Species Act before they face extinction.

Maine, Rhode Island, New Hampshire, Vermont, Idaho, North Dakota, Wyoming, and Oregon each have zero or close to zero American bumblebees left, according to a petition by the Center for Biological Diversity and Bombus Pollinators Association of Law Students.

"The American bumble bee was once the most common bumble bee species in North America, but without immediate action to protect it under the ESA, it will continue its alarming decline towards extinction," the petition authors wrote.

Over the last two decades, the American bumblebee population has decreased by 89% across the U.S. New York had a decline of 99% and they disappeared from the northern part of Illinois that has seen a 74% decrease in population since 2004, the petition said.

A 90-day review conducted by the U.S. Fish and Wildlife Service found substantial evidence that the listing of the American bumblebee under the Endangered Species Act may, in fact, be warranted.