CENTRAL COAST BEEKEEPERS NEWSLETTER

February 2019

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NEXT MEETING FEBRUARY 27TH, 2019

PRESIDENT'S MESSAGE

By Jon Sumpter

Hello again, It's February and our club meeting is coming up on February 27. We're looking forward to seeing everyone.

This month's topic will be "OK, I've got a box o' bees, now what?" In the next few months our beekeepers will be getting new packages of bees. To the uninitiated, getting 4000-8000 flying, buzzing bees out of a little 8 x 6 x 4 container into a large open box (hive box) without losing any is impossible. That's not true. Come find out why.

The beekeepers on the other side of the mountains are puttering around their shop building bee boxes, bottom boards and top covers. Their bees are snug in snow covered hives. Their bee year will begin sometime in March and or April.

We coastal beekeepers seem to be beginning our bee year right now. Looking into my hives three weeks ago (when it was warm), a couple of three-inch squares(?) of capped brood and larva hid under a mob of bees. Mmmmm...GREAT!

Looking for the queens occupied a few minutes, didn't find them. I did find other bees. She was a larger winter bee, black, hairless and shiny. My elation for the brood was dashed by this bee. Digging in the bee books, she may be a victim of chronic bee paralysis virus CBPV. There weren't many individuals, thank goodness.

What can I do about this problem? Nothing. No, that's not true. My girls are under stress. Winter confinement, nope, can't do anything about that. Crowding, nope, went into winter with a large population. Food, yes, can do something there.

Fresh pollen substitute is in order. Made them two days ago and waiting. The temperature hasn't been above 40 degrees since. My worry wart is itching really bad. Are my girls OK? Are they in decline? What didn't I do now?

Beekeeping is all about timing, doing the right thing just before it's needed by our charges. One of these days, I'll get that figured out.

Looking in a hive, frames and at individual bees, note what is there and note what is not there. Bees covering brood, half-filled cells of pollen, location of capped honey. This inspection tour, one drone found. Sure, there are probably more.

I'll close for now and see if the sun is shining on my hives with the girls flying a little. I'll sneak a couple of pollen patties into the brood chambers if all goes well.

If you have a few minutes… check out www.pnwhoneybeesurvey.com.

If you have not paid/renewed your club membership yet, you can either bring your dues to the February meeting or send them, along with the membership form attached to this e-mail to the treasurer – Gaelyn Matthews at P. O, Box 414, Seal Rock, 97376. Membership runs on a calendar year, so your membership will run through the end of 2019.

The Bee order time frame has been extended to the end of our meeting next week – February 27th. We have had a large interest in bee orders since our last meeting as folks have gotten out and observed their hives and found that some have died. This will be the **VERY LAST** opportunity to order this year as we have to get our final order in the following day so, if you haven't yet gone out and observed how your hive(s) are doing – now would be the time as no exceptions will be made to expand the order after next weeks meeting. As usual, we can always cut your order back and just not pick up as many bees if you decide that you do not need as many as you ordered. We can do this right up until the day we pick them up.

Our February meeting is Wednesday, February 27th at 6 pm at the Newport Library. The topic will be:

"OK, I've got a box o' bees, now what?"

If you plan to get bees this year for the first time, you wont want to miss this meeting!

Washington State Beekeepers Meeting - Cheney, WA

by Rick Olson -February 9, 2019

I guess you guys had a great time at the Honey Festival in Yachats last week. I sent my better half as I had an opportunity to go to the Washington State Beekeepers Association meeting. The drive up to Cheney, Washington, was a breeze but coming back was another story. Ask me about it next week at our February meeting.

The keynote speaker at WASBA was Jerry Bromensenk from the University of Montana. He has done research on using "trained" bees to map minefields. He's also used them to find invasive snails in the everglades. They use snail smoothies for the training. Bees can also be used as canaries for clouds of poisonous gas.

Jerry's research using electronics began when he was asked by the Department of Defense to develop methods of land mine detection. Dogs take time to train, are expensive and heavy enough to detonate them. Jerry and his team developed a way to train honey bees in just a few hours. Feeding explosive material mixed with sugar syrup will train them to fly to and swarm around any source of explosive that is in the area--standard operant conditioning. Lidar tuned to their wing beat frequency can then be used to map these clusters reflecting the location of landmines. Efficiencies higher than 97% have been recorded.

This research with honey bees and electronics evolved into designing a method for analyzing colonies. I'm sure you all know what an angry hive sounds like. By listening carefully an experienced beekeeper can detect a queen less hive. Without a queen the colony will make a roaring sound much different than a "happy" hive. Closer attention to the sounds of a honey bee colony can reveal other conditions such as aggressiveness, readiness to swarm, chemical exposure, European vs Africanized bees, American foulbrood, or Varroa mites. These conditions can be broken out using Artificial Intelligence to analyze frequencies and amplitudes of bee sounds.

Even neater, Dr. Bromenshenk and his team have developed an iphone, Android, and Windows 10 app called Bee Health Guru that can detect five hive conditions--Africanized bees, hive beetles, foulbrood, Varroa mites and what a normal hive sounds like. Hopefully it will be available in April or May. There is a back-yard beekeeper version and a pro version that should be invaluable to commercial beekeepers, bee inspectors, and bee researchers. Healthy colonies can quickly be evaluated so that problem hives can be isolated and attended to. Another

innovative feature that they've developed--all data is updated to a master data base. Colony issues can thus be evaluated across the entire North American continent and trends determined such as where pockets of disease are located. Treatment can then be focused on specific locations. We'll beat Varroa yet!

Registered users of the www.beehealth.guru site will get notification when the apps are available. When beta testing and calibration for various Smart Phones and Tablets are complete, all versions will be made available to everyone worldwide. Watch for public notification of release this year.

Keeping a Bloom Log and Planting for Pollinators

As winter begins to dissipate and spring bulbs start to poke up through the ground, we beekeepers start to dream of having booming colonies with happy healthy bees collecting pollen and nectar throughout the foraging season. Nectar and pollen contain almost all the nutrient requirements for our honey bees. Blackberries and native wildflowers and shrubs are major nectar producers with the primary honey flow period beginning when the blackberries start blooming. Unfortunately, due to the changing plantings and farming methods, urbanization and pesticide practices, finding a succession of blooming plants that provide sufficient nectar and pollen for the honey bee has become more difficult.

Honey bees visit between 50 and 100 flowers during one collection flight. Two million flowers must be visited to produce one pound of honey. The bees must collectively travel 55,000 miles to collect enough nectar for their needs. Bees have been observed to carry a third to a fifth of their body weight in pollen and almost their own body weight in nectar! A honey plants' contribution to a bee colony is classified as major (seed clovers, vetch and berries), secondary (maples) or minor (important for colony buildup and maintenance but not for surplus honey – such as dandelion, heather, weeds and wildflowers). Not all plants are accessible or of value as nectar and pollen sources to honey bees.

So, any help we can give our bees, to ensure there are ample nectar and pollen sources February through November to keep our bees strong and healthy, will help prevent dearth periods. It will also encourage nice fat winter bees. With this goal in mind, the first thing we can do is to keep a monthly bloom log to record what's blooming around your hive, average daily temperature and what the bees seem to be attracted to. Keeping in mind that bees can forage out two or three miles from their hives so getting an estimate of what is growing in neighboring fields and yards is also important. List the plants you currently have in your landscape per month and look at

variances. Weather permitting, are the bees visiting the flowers you have? Don't forget any herbs, trees or vegetables you may have growing. Are the plants you have available high in nectar and pollen? Are there observed times of dearth? Are there flowers that the bees do not go to or are really attracted to? Are the flowers you have providing good nectar and pollen sources? How long are these plants blooming? Is there a correlation between what is blooming and what the bees are foraging?

If you find times of dearth, poor availability in certain months or when sources are available but are poor sources for honey bees, you can look at planting good nectar and pollen plants for your hives that will better meet their needs. There are a great variety of online sources and books available that list the plants and flowers available in our area. A good source of information is the book 'Nectar and Pollen Plants of Oregon and the Pacific Northwest' by Burgett, Stringer and Johnston. It provides a detailed illustrated dictionary that provides growth types, bloom period, color and whether the flower is a good source of nectar and pollen. Also, a good reference is 'Plants and Honey Bees – Their Relationship' by D. Ashton and S. Bucknall. Bees have a strong tendency to forage on only a single flower species at a time (known as flower consistency) so planting large areas of a high pollen/ nectar flower is also beneficial.

There are several other factors affecting pollen and nectar availability that are beyond our control such as weather (rain when pollen is available or drought), late frosts, the strength of overwintering flowers, humidity and even time of day, keeping an eye on hive stores and supplementing as required is also beneficial. Even though we can't control all these variables, keeping a bloom log and acting to help support our bees in observed times of dearth during their foraging period can only help to contribute to year-round healthy happy bees.

At Large – Kathy Cope

At Large – Jim Parrish

At Large -Pat Wackford