



CENTRAL COAST BEEKEEPERS NEWSLETTER

May 2018

ISSUE NUMBER 26

NEXT MEETING MAY 23RD, 2018

ATTENTION!!! – Remember that the May meeting will be held back at the Newport Library.

President's Message By Patti Johnson

May 8th was "Teacher Appreciation Day". I happened to hear it on the news, and for a moment, I did stop to think about the teachers I have most appreciated. Whomever thought this day up, probably wasn't thinking about beekeeping mentors, but that is who I instantly thought of.

I have been very blessed to have two mentors that have had the patience to help me learn and become adept and comfortable in taking care of my bees. Starting out as a complete novice, only having read about beekeeping, my first mentor didn't hesitate to patiently explain the basics, help trust the protective equipment to become more comfortable around the bees, and make sure every outing was a learning experience (though sometimes that experience ended up being what not to do, then laughing about it).

My second mentor was assigned through the Master Beekeeping Program. He made sure to point out what I was doing right and helped to build confidence in beekeeping decisions. He

guided me as I did the task, knowing when to step in, but leaving it up to me to think through alternatives, and if I started going in the wrong direction, redirecting through leading suggestions.

When I would try to thank them for their help, they both had a habit of saying, "Just pay it forward." It was these "teachers" that that gave me a desire to give back to young beekeepers and to the beekeeping community. So, on May 8th, "Teacher Appreciation Day," I stopped for a moment and thought about my two mentors, Jerry and Max... Thank you! And thank you to all of the other "teachers" who take the time to help ensure the best prospects for our bees surviving.

Our May meeting will be on Wednesday May 23rd at the **Newport Library**. Jim Parrish will be sharing information gained from his attendance at the Trifecta Bee event in Hood River with beekeeping experts Thomas Seeley, Andony Melathopoulos, Alison McAfee.

Our June meeting is Wednesday June 27th at 6 pm at the **Newport Library**. We will be celebrating Pollinator Month with a presentation on how to set up a pollinator garden to support your bees and other pollinators by our own Anne Schatz, followed by an opportunity to make seed balls and plant some seeds to take home.

April Board and club meeting highlights

CCBA Board Meeting 4/25/2018

1. People who sign up and become members after the county fair will have a membership that continues throughout the following year.
2. Pat lead a discussion regarding the pros and cons of becoming a 501(c)3 federally recognized not for profit. The Board agreed that as we are registered with the state as a not for profit, it was not necessary to pursue this at this time.
3. Question: What protects us from lawsuits? - Membership in OSBA covers us with their liability insurance.
4. Meetings:
Tonight's meeting: web page refresher during the social period.
May meeting: Jim will report on the Trifecta meeting in Hood River.
June meeting: Pollinator week...talk by Anne (how to help pollinators), make seed bombs, pollinator plants.
5. Master Gardener plant sale: May 19 -Need volunteers for the bee club table.

6. Short presentations by members regarding special activities or talents might be incorporated into the meetings for added interest and to get to know members better.

Other ideas: short video on splits, talk by a commercial beekeeper.

7. May 1st: people who need their names put on or taken off the bank card will meet with Gaelynn at the bank.

CCBA Member meeting 4/25/2018

The meeting tonight was held at the OSU extension office with 28 people attending.

Social time from 6:00-6:30.

Raffle tickets were sold and door prizes given out.

Website review by Rick Olsen.

Type in ccba.org.

Categories include membership information, monthly meetings, pest and disease information, forage information, swarm list, videos and much more.

Becca: Pollinator event this Sunday at Yachats Commons...seed swap and sale.

Mike Rodia, OSBA agriculture liaison: Residential Beekeeping and Best Practices

He talked about how he got into beekeeping.

Hints: Harvest honey all season to

increase yield.

Don't sharpen your hive tool.

Ideas for using mismatched

boxes/frames. However, if

possible, use the same size boxes and frames for interchangeability.

He discussed the model set of guidelines for residential beekeeping developed by him and Andony Melathopolis that would be consistent for all of Oregon to minimize the nuisance value of residential bees.

1. Limit number of hives.
2. Setback issue or how to minimize bees going into a neighbor's yard.

Best Practices are effective only if they are followed. Local governments are still able to establish their own rules but are required to take Best Practices into account when doing so.

Every beekeeper should have a copy of the Best Practices.

1. Beekeeper education and resources

2. Location of hives
3. Colony management to minimize aggressiveness
4. Swarm control
5. Regulatory matters
6. Communication

A complete copy of the Best Practices will be placed on the club's website

Assault on Honey Bees

by Dr. Dewey M. Caron

SAVE THE BEES. As beekeepers we have the occasion to see lots of websites with information about how we can 'Save the Bees.' There have been, through the years, discussions regarding the appropriateness of including honey bees in efforts relative to the essential ecosystem service of pollination. Honey bees are dismissed in such efforts, by some, calling it a managed livestock species of agriculture and its distribution outside of agricultural settings might not be beneficial to the native pollinators.

Writing in *Science*, one of the most prestigious Journals of science, Cambridge University (England) scientists Geldmann & Gonzalez-Varo, argues in a recent editorial *Conserving honey bees does not help Wildlife* (Vol. 359, Issue 6374):

"The crisis in global pollinator decline has been associated with one species above all, the western honeybee. Yet this is one of the few pollinator species that is continually replenished through breeding and agriculture, ... Saving the honeybee does not help wildlife. Western honey bees are a commercially managed species that can actually have negative effects on their immediate environment through the massive numbers in which they are introduced".

Negative effects cited include *"wild bee declines through resource competition and spread of disease."* The authors maintain " *Environmental initiatives promoting honey beekeeping in cities or, worse, protected areas for from agriculture, is only likely to exacerbate the loss of wild pollinators."*

Another recent editorial in leading Journal *Conservation Biology* *Questioning public perception, conservation policy, and recovery actions for honeybees in North America* by York University (Canada) professors Colla & MacIvor (Vol 31 # 5) includes a literature review and covers the major talking points of those who believe honey bees should be excluded as they potentially can be harmful to native pollinators and vegetation.

Some federal agencies and agencies that manage wild lands exclude honey bees, while allowing other livestock. Lack of sufficient forage has been increasingly discussed as one of three to four major factors in negative honey bee health. Our pollinating bee colonies need a *"time out"* a period of "clean" forage away from pesticides to re-build populations and produce fat fall bees adequate to overwinter. If honey bees are excluded from forage areas on the pretext that they cause harm to native pollinators and that honey bees should not be included in conservation efforts, such forage opportunities might be denied. The consequence for the low-cost food we eat, courtesy of bee pollination, might then be in question. (NOTE: If you would like copies of these two (short) editorials I can send as email attachments.

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In Oregon we do NOT exclude honey bees. The latest quarterly newsletter of the Oregon Bee Project

<https://www.oregonbeeproject.org/> includes a report of current commercial pollination efforts of honey bees (see the great photo of bees pollinating radish) and some other bee pollinators (mason and alkali bees and BOB - Blue Orchard Bees). There is also a week-long bee school for taxonomy/identification of native bees in July (an advanced training different from the one-day Bee ID workshops), plus some of the announced happenings of National Pollination Week <http://pollinator.org/pollinator-week> June 18-24 which includes a LCBA co-sponsored event in Eugene at the Eugene Science Center. If not already receiving the OREGON BEE PROJECT newsletter you will need to sign up to receive it.

PollenCheck

Are you interested in looking more closely at honey bee forage? Check out **PollenCheck**, a new mobile application from The Beelformed Partnership (BIP). We are well aware, especially in the spring months, that pollen is a key resource for honey bees, a resource they must be able to find in sufficient quantity and quality in their local forage. Yet, we know little about the quality of forage available to honey bees. Collecting and processing pollen can inform us about bee health, give us a pulse of their surrounding environment, provide a historical and geographical context and help make predictions on colony productivity.

PollenCheck is designed to facilitate the collection of pollen data and encourage individual "citizen scientists" to use a mobile application running on smartphones. The app provides information on a proposed protocol allowing the entry, collection and aggregation of geocoded data into a centralized cloud-based database. The new BIP application will include entering colony health measurements, such as queen status, colony size, amount of uncapped brood and mite count. The specific pollen information required includes total volume collected and number of colors in a 100 pellet sub-sample, as well as the number of pollen pellets of each color.

To participate in **PollenCheck** you need two colonies in the same location, two front porch pollen traps (available from Brushy Mountain with a discount code), a **PollenCheck** pollen processing kit available from BIP (\$25) and a smartphone (iPhone or Android device) to download the **PollenCheck** mobile application which is available in the app store. To learn more about the **PollenCheck** program and view the tutorial videos visit: <https://beeinformed.org/programs/pollencheck/>.

Keeping Bees in May

Lynn Royce , Professor Emeritus, OSU

Beekeeping in the Pacific Northwest during the month of May has a lot to do with what happens in April. When colonies swarm in April, they have time (May and early June) to rebuild their workforce and be prepared to glean the best nectar flow to make stores for winter. There are swarms in May, and, if April is too cold and wet, May can be a major swarm month.

The old ditty-a swarm of bees in May is worth a load of hay, a swarm of bees in June is worth a silver spoon, a swarm of bees in July is not worth a fly-somehow does not and never did work for Oregon. If a colony swarms here in June, it is less likely to survive winter without help. May is still a month where it is critical to support your colonies and prevent swarming. If the colony does not swarm, it may be strong enough to not only get through winter but also make a surplus of honey for the beekeeper. Swarming is the reproductive event for honey bees. Like any reproductive event, there is a lot of uncertainty. When a colony of bee's swarm, the bees that stay in their old home must raise a queen, and she must successfully mate and return to lay fertile eggs for that colony to continue. Raising a queen from an egg to a laying queen is a time-consuming event. There must also be time for the new queen to produce enough progeny so that there will be the foragers to collect winter stores and raise the bees to become the

overwintering workforce that will keep the queen warm and fed until flowers return in spring. The swarm must find a new home, find food in the new location, and construct comb, so that their queen can restart her egg laying that will produce the workforce to collect winter stores and raise the progeny that will be the winter bees. It is easy to imagine how one or both of these colonies might fail. Swarm prevention requires an understanding of honey bee biology, especially their individual life cycle and their colony life cycle. Remember, swarming is a strong instinct and to be late with any preventive manipulation will probably result in swarming and perhaps loss of the colony left behind.

The queen in May is laying 1-2 thousand eggs every day, averaging 200,000 fertilized eggs plus a few unfertilized eggs during the laying season: March through October or November. The most-intense egg production occurs over spring and early summer. She is fat and heavy and cannot fly. Because the bees maintain a constant temperature within the brood nest, development is very constant. When a colony is raising lots of drones, the colony is thinking of queen mating and swarming.

Lots of drones can also be the result of a laying worker. Look at the brood. There should be eggs, larvae, and pupae; drone brood should be separate, usually in the corners and top of the comb. Old frames can cause confusion, having larger cells or drone brood more randomly distributed over the frame if bees had to repair the comb. Laying workers often lay several (three or more) eggs per cell, and their abdomens are short, so most eggs are on the sides of a cell. This problem can only be turned around near the beginning of laying by a worker, and the only remedy that I have seen that works is the introduction of 1-2 brood frames with eggs and young larvae from a queenright colony.

Back to the swarm event. If the queen is to fly off with a swarm, she must first lose weight. So, when the colony decides that the time to swarm is near, they stop the queen from egg laying a week or so before they expect to depart. This means that in three days there will be no more eggs in the colony, and in six days all the larvae will be three days old or older. A larva at three days old can no longer become a queen. Before the queen is stopped from laying, the workers have been busy making queen cells (called swarm cells). The cells are usually placed along the lower edges of combs; for beekeepers, this is the bottom bar of a frame in standard Langstroth equipment. Eggs are laid in these queen cells over several days, so the larvae in these cells differ in age. There can be only a few of these cells or many. I have counted as many 50 in a single colony. The first queen to emerge from one of these cells will begin to kill the other queen pupae. Usually some are missed so multiple virgins may exist in a colony during this time. Some are killed during battles between virgin queens, but in my experience, never all.

Just before these queens begin to emerge, the colony will produce a "prime" swarm including about 20-30 percent of the workers. When conditions are right, the workers coax the old queen out of the colony. The colony is now left with mature queen cells, some older larvae, and capped worker and drone brood. When virgin queens emerge, they need 3-4 days' development time (cuticle hardening and muscle development) to be able to make mating flights. A virgin queen may make 1-2 flights to mate. After mating, she needs another 5-7 days to get the sperm into her spermatheca and develop her ovaries. When she does start to lay, she will begin slowly. Her first laying pattern will only be a small area of eggs. This colony, even with the newly mated queen, will not make excess honey and may need to be fed to have enough stores for winter.

"After swarms" may occur when several virgin queens have emerged a few days before the prime swarm leaves. When the prime swarm has left, one or two of the virgin queens can leave the colony with a small number of workers. The function of after swarms has never become clear to me. Sometimes when more than one colony swarms at the same time in the same apiary, the swarms merge into a larger entity and will contain more than one queen.

After the colony swarms, a virgin queen must go on mating flights and return. Mating flights are hazardous for these small insects. Weather in spring is unpredictable, and many predators (birds and other insects) are also flying, searching for prey. If the virgin is killed by bad weather or eaten, her colony will be queenless and without the resources (young open brood) to rear another queen. If the beekeeper has only the one colony, he or she is faced with starting over next year. Queens can be mail ordered or often found locally from queen breeders, but it takes time and an already queenless, broodless colony does not have time. Currently, there are more local queen breeders, so the possibility may exist to get a mated queen quickly; generally though it can take at least a week or more for an ordered queen to arrive. Requeening in this situation is difficult because the colony has few young bees and no brood. Older worker bees are not likely to accept the new queen. Timing is also critical. A new queen needs 4-6 days in her introduction cage before she can be released. Longer is better because these are older bees and the probability of acceptance is already low.

If you have more than one colony, you can use open brood from a queenright colony to maintain the colony that swarmed. They can rear a queen from young brood if there are larvae less than three days old; however, time is against this being successful. So, how does one prevent swarming?

Swarm preparation begins when space in the colony is reduced and bees are crowded. Adding space can reduce the urge to swarm. One way to start before every cell is full of brood, honey, and pollen is a technique called checker boarding. This is taking empty frames and placing them between frames of honey and pollen. Start with empty frames on the outside edge of the box or super. If you remove frames, you will need a place to store these honey and pollen frames. Freezer space would be my recommended option. A second colony in need is another good option. It is a good "idea to leave the brood nest alone. If the queen has no place to lay, an empty frame can be put into the brood nest for her to lay in. Another tactic to add space is to place a super with empty frames above the brood nest.

This is a good month to make new colonies or splits, basically artificial swarms, where frames of bees are transferred from a strong colony to another box making sure each box has some open brood. For the colony that bees and brood are transferred from, this would take the place of a swarm. The difference is that you supply the newly mated queen for the split.

Splits start by ordering or raising new queens. Two days before you expect new queens to arrive, make your split. You can use a nuc box (five deep frames is a standard nuc) or a single regular box. For a nuc, include two brood frames with lots of young bees if possible, an empty frame for the new queen to lay eggs in, and two food frames with both pollen and honey. Brood frames should be centrally placed together so you can place your caged queen between these two frames, empty frame next, and food on the outside. These bees should be held queenless for at least two days before introducing the caged queen. I have found the best success with queen acceptance happens if it takes the bees at least four days to release her. Make sure the candy plug is available to the bees in the nuc or single. Queen rearers generally put the correct amount of candy for a four-day release. Even though you expect the queen to be released after four days, leave the unit alone for at least six days, then just check by pulling up the cage to see if she is released. If she is not, check the plug making sure it is open or nearly open, then gently put the cage back. If she is released and cage is empty (sometimes a worker or two may be inside), remove the cage but leave the colony alone.

Bees are very nervous when they are queenless even after a new queen is placed into the colony. Too much disturbance at this stage may cause the workers to kill her. Give them another week, and then check for eggs and young larvae. By now, these will belong to the new queen. When you are checking for eggs, you can reverse one of the frames that held the queen cage so the bees will correct the devils

left by the cage. Sometimes if the devits are together the bees will build a bridge of comb between them connecting the frames.

You can also cage the queen to stop her laying and thus reduce population build up. I have never done this, as I do not like to cage a laying queen that is producing 1,000-plus eggs each day. I expect this tactic to be rather hard on the queen. I would never hold a laying queen longer than a few days.

May is a good time to requeen. Have your new queens ordered before you start this process. A new queen is less likely to swarm. Most seasoned beekeepers will say, find the old queen (that you are replacing) and kill her. However, I would use a nuc and hold the old queen until the colony has accepted the new queen. In my early days of beekeeping, my requeening acceptance rate was not 100 percent. If you only have one or two colonies and a new queen is not accepted but you have killed the old queen, do you have a backup plan?

As in April, feeding may be critical in May. The weather is still unpredictable, so watch your colonies closely. The bees are building population rapidly, and the colony may only be able to bring in just enough food to last a few days; if the weather prevents foraging, the colony will starve. It is always the biggest and best colonies that are lost when this happens. May is the time of year that can be good for collecting swarms. So, if you have nuc boxes, have them handy. The first person to the swarm usually gets the swarm. Keep in mind, early swarms will need full-size boxes soon. You must have equipment ready to transfer the swarm into, unless you want give the swarm away or sell the bees. Don't forget to feed the swarm.

May is the time of year when queen rearing in the Pacific Northwest can happen successfully. But it can also be cold, so I prefer to raise queens in a nuc box (five frame) to be sure there are enough bees to keep a new queen or queen cell warm.

May is a good time to start checking for Varroa mites. There are several options for checking for mites and estimating their population. Probably the most-common technique is the sugar shake. Use a pint jar with a screw-on ring and instead of solid top have a fitted screen (hardware cloth) with eight squares per inch. Roll a sample of bees off the comb into the jar by placing the jar upright near the top bar and pressing the lip of the jar gently against the bees and move the jar in this position down the comb. The bees will roll into the jar. Be sure you find your queen and remove her on the frame and set aside, preferably in a nuc box, before you take your sample. When you feel you have collected about 300 bees (1/2 - 3/4 cup of bees), place the screened lid on the jar. Add about a tablespoon of powdered sugar through the screen and shake the jar to coat the bees with the sugar. Then hold the jar upside down over a white or light-colored tray or plastic container and shake to separate the mites from the bees through the screen. Water can be poured into the container to make the mites easier to see. If you have 3-6 mites in spring, the recommendation is to treat for mites; in fall, treatment is recommended if you count six or more for a 300-bee sample. There are several websites that will provide pictures and/or other methods of sampling. It is a good idea to follow your mite loads through the season whether or not you treat for mites. Mite populations are one more thing we need to understand to be better beekeepers.

Oregon Dept. of Agriculture Apiary Registration

Every person who owns, or is in charge of, five or more colonies of bees located within the state or Oregon, must register their hives with the Oregon Department of Agriculture. If you currently own less than five hives you are not required to register your bees at this time. The current cost of apiary registration is \$10 with an additional charge of \$0.50 per colony for five or more hives. After July 1, the registration fee will increase to \$20. The

fee per hive remains at \$0.50 per colony for five or more hives.

Click below to view Oregon's apiary registration rules and regulations:

<http://www.oregon.gov/ODA/shared/Documents/Publications/IPPM/ApiaryRegistrationFAQs.pdf>

Click below to access registration form:

<https://apps.oregon.gov/SOS/LicenseDirectory/LicenseDetail/606>

ANNOUNCEMENTS AND OPPORTUNITIES

June 16th - Seal Rock Garden Club flower show and plant sale

June 18th – 24th - National Pollinator Week

July 6th & 7th – Lincoln County Fair in Newport at the Fair Grounds. We will probably have a booth.

**August 3rd-5th – Western Apiculture Conference – Boise, Idaho.
www.westernapiculturalsociety.org**

APIMONDIA 2019 congress which will take place in Montréal from September 8 to 12, 2019 www.apimondia2019.com.

Sept 15th - Tom Seeley Event Location: TBD somewhere in the Portland area Cost: Early Bird by Aug. 15th \$40, after the 15th \$50 Sponsored by: Portland Urban Beekeepers Assoc. For more information: <https://portlandurbanbeekeepers.org/seeley2018/>

October 26th – 28th Oregon State Beekeepers Association annual conference at the Salem convention center.

Mark your calendar now and more information will be coming once the agenda for the conference is finalized. Several club members have attended over the past few years and have found the presentations and networking to be very valuable.

This is the official publication of the Central Coast Beekeepers Association (CCBA) for the purposes of informing and educating its membership. Any use of the materials included in this newsletter for other reasons must be approved by the board of CCBA. The information and opinions expressed by the authors in this newsletter are for informational purposes only and are not necessarily endorsed by the Central Coast Beekeepers Association. To arrange for publication or distribution of this material, please contact the organization through their e-mail account at: www.centralcoastbeekeepers@gmail.com

Rebecca Fain – Newsletter Editor

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