



CENTRAL COAST BEEKEEPERS NEWSLETTER

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NEXT MEETING October 26, 2022

This Month: Panel Discussion

This month we will have a panel discussion about getting your hives ready for winter. There will be plenty of opportunity for you to ask questions and develop plans for this year's overwintering. If you haven't joined us in a while, now is a great time to catch up with your fellow beekeepers.

We will be meeting on October 26th at 6:00 pm at the Newport Extension office. **The LC Extension Office is at 1211 SE Bay Blvd., Newport, OR 97365**, on the Newport Bay front, just beyond the Embarcadero on the opposite side of the street.



PRESIDENT'S MESSAGE

By Pat Wackford

At the September meeting we had a special speaker, Dr, Ramesh Sagili, from the OSU Bee Lab give a talk and power point presentation about what to look for in your hives and what should be done this time of year to get your bees ready for winter. Topics included mite testing and treatment options, checking the brood and queen viability. He also talked about feeding the colony now if hives are light and need more stores, so they are healthy, "fat bees" that will live several months through the winter. He discussed several research projects that he and his Lab Assistants and Master Students are currently studying.

At this month's meeting on October 26th, there will be a Panel Discussion on getting your colonies through the winter months. We will discuss options for moisture control, feeding and insulation and protection from the winter weather.

The Oregon State Beekeepers Association 2022 Fall Conference is October 28th to 30th. If you have never attended a conference, it is a great experience. Get up to date information on beekeeping and talk to other beekeepers in Oregon. You can register online at orsba.org. If you are unable to attend in person, you can register for the conference online.

Beekeeping During the Dearth of Nectar

By Scott Derrick Blytjwood Bee Company

The sugary goodness of honey is often appreciated during the summer months when there is plenty of nectar to go around, but what about the winter months when nectar is scarce? Most new beekeepers struggle with understanding the added responsibilities that come with the dearth of nectar. However, before you move on to caring for bees during such a time, you need to understand the natural process that leads up to such a situation.

What is a Nectar Dearth?

This is a time period where there is a scarcity of naturally occurring nectar in the environment. The flow of nectar usually happens before and after a nectar dearth. So you might experience a time in between those nectar flows where the nectar is significantly lower than normal. That is a *Nectar Dearth*.

A nectar dearth is highly dependent on the weather. It can occur when it is too hot, too cold, too wet or too dry. So you must be looking at the weather for your first signs of a nectar dearth. This usually happens during the very hot and dry summer months or extremely cold and wet winters.

This is a tough time for the bees in your colony. They completely depend on nectar as a food source and it is also the main ingredient in honey. This makes nectar one of the three food sources for bees besides pollen and honey. This makes nectar important to bees. When they can't find sufficient amounts of nectar in the environment, they will start consuming the honey they had stored inside their colony.

A nectar dearth can spell disaster for a weak colony and you as a beekeeper need to take action to protect them during this vulnerable time. However, for more healthy colonies, it is just another time of the year. Depending on the status of your hive, you will either have to take action to help your bees or watch and wait until they consume the stored honey until the dearth comes to an end.

The severity of the dearth can impact your hive in different ways. Sometimes the dearth that occurs between two nectar flows can be managed with no further interference from the beekeeper than through careful monitoring.

However, more severe nectar dearths that occur when there are no flowering plants blooming in the foraging range of the hive can be more dangerous to your beehive. Your bees will travel further out in search of reliable food sources. When this happens, it is more likely that your bees require supplemental feeding.

Bee-haviour of Bees During a Dearth

During the dearth, bees will stop making honey or nutrition-rich wax combs. They will go into survival mode and focus on keeping the colony alive and healthy enough to survive this difficult time. There have been instances where colonies have reduced brood rearing during a dearth. You can also identify a beehive going through a nectar dearth as they tend to be much more defensive during hive

inspections. This is a sign that the bee colony is under stress from the local natural forage.

Most beekeepers make the mistake that bee colonies are happy during the summer because they have an abundance of flowers to feed on. But low rainfall and high heat can impact the amount of nectar that is produced by flowers. This means that a summer dearth is almost inevitable. If you start noticing a sudden drop in the production of honey, this means that the bees drawing comb or storing honey abruptly come to a halt.

Another action that you can take as a beekeeper is that you can observe the type of flowers that the bees are visiting. If they are flocking around less desirable flowers, this means that they have no other options available for them.

So, look out for these signs of the Dearth of Nectar.

Dangers of a Nectar Dearth

Did you know that a nectar dearth can lead to stronger hives robbing weaker colonies? Bees take their nectar and make honey from it which they use for food during the winter months when flowers are not in bloom and bee colonies have less flying weather to find food in the environment. If a colony of bees does not have an adequate supply of food during a dearth, entire colonies are in danger of starvation. The stronger the colony, the faster they will eat through their resources. Once a strong colony has gone through their own food supplies, they will engage in robbing behavior where they enter another colony and steal their honey by force. This will most likely result in the death of the weaker colony of bees.

To prevent this from happening, beekeepers must feed their colony sugar water so they can survive. This is called *feeding*. Many beekeeper use a [Boardman Feeders](#) to feed their bees during dearth but they realize quickly that a top feeder, such as the [Ceracell 10 Frame Feeder](#) is far easier than filling up a jar every day. Most top feeder hold a couple gallons of sugar syrup which make is far easier on the beekeeper.

Another item that few new beekeepers use during a dearth of nectar is an entrance reducer or robbing screen. This slows the robbing attempts by other hives who seek to steal honey from weak hives. The robbing screen arranges the entrance a bit higher than the normal landing board entrance and confuses robber bees which keep them from stealing the precious gold resources.

Be Diligent Feeding Your Bees During a Dearth

Although it is difficult to pinpoint how long a nectar dearth will last, it is possible to overcome the unique challenges presented by it for beekeepers with proper maintenance and care through feeding. Having a proper water source as well as bee feed will assist the bees their efforts to keep the hive cool and nourished properly.



A once-obscure type of beekeeping could help save colonies

By Marissa Hermanson from The Washington Post

September 21, 2022

Honeybee colonies have been dying more frequently in recent years than they used to, in large part because of a phenomenon commonly known as colony collapse disorder. Parasites and the stresses caused by commercial beekeeping practices have contributed to the problem, according to Thomas D. Seeley, a retired Cornell University professor who studies the behavior and social life of honeybees.

“It used to be a beekeeper would expect to lose 10 to 20 percent of colonies in a year, mostly over the winter,” he says. “And now the colony mortality can be 80 percent.”

Bees have been around for about 120 million years, though, says Brenda Kiessling, a retired physician and an Eastern Apicultural Society of North America-certified master beekeeper living in Vienna, Va. They have proven themselves capable of adjusting to changing conditions. “They have survived on their own and they have had to adapt,” says Kiessling, who has been caring for honeybees since the early 1970s. “They’ve lived through ice ages, rainstorms. Somehow they have survived.”

That knowledge has led Seeley, along with Kiessling and other researchers and amateur beekeepers, to embrace Darwinian beekeeping over the past decade. Once a niche practice, it is becoming more popular with hobbyists. It focuses on creating optimal conditions for bees to make honey, while also mimicking how *Apis mellifera* lives in the wild. That means housing colonies in small hives that replicate the size of a natural nest cavity, spacing hives far apart to prevent the spread of parasites from one colony to another, and positioning them far from areas treated with insecticides.

Kiessling has been following these guidelines with the bees she keeps at Sandy Spring Gardens in Ashton, Md., for the past three years. But first, she spent nearly a decade reading and researching, including by listening to several of Seeley’s lectures on the practice.

Seeley addresses the subject in the last chapter of his book “[The Lives of Bees: The Untold Story of the Honey Bee in the Wild](#).” The term “Darwinian

beekeeping” is a nod to Charles Darwin’s principle that natural selection over time gives species the ability to survive and reproduce.

“If you let an animal live naturally, it is able to use its full toolbox and set of skills to survive and reproduce,” says Seeley, who has been studying honeybees in the wild in the Arnot Forest outside of Ithaca, N.Y. “But when you take any kind of animal and you force it to live in a different way, those tools aren’t allowed to function very well.”

The practice addresses several of the causes behind colony collapse. A parasite called the Varroa mite, which isn’t native to the honeybee species in the United States, is infecting them with deformed wing virus. The mite can attack honeybees when they are developing. “They come out with shriveled wings, and they are pretty helpless and hopeless,” Seeley says.

Combating the virus starts with getting bees that have good genes, Seeley says. “What hobby beekeepers are taught is you get your hive in the winter and nail it together and paint it. And then in the spring, you order a package of bees from Florida or Georgia, and those bees are just junk” in terms of being able to fight the varroa mite, Seeley says.

In the commercial queen production industry, queen honeybees are produced on a large scale, bred for large colony size and high honey production, but they aren’t usually resistant to mites. In the wild, by contrast, adult worker bees (the queen’s daughters) have evolved to kill Varroa mites by biting off their legs. This adaptation is preferable to using miticides to kill the parasite. “Let the bees show you which ones can survive,” Seeley says.

To get mite-resistant honeybees, Seeley says, beekeepers can capture a wild swarm by putting out bait hives in remote places, far from colonies kept by beekeepers. In spring, when the hive gets too crowded, the queen and half the colony will swarm, or leave the colony to find a new home. Kiessling recommends capturing the swarm while they are hanging out on a tree branch or bush. It can be days or just minutes that they are waiting there, looking for a new home, so you must work fast.

“You’re lucky if [the swarm is] on a low branch,” she says. “You can just put your garbage can underneath it and shake them into it.” Other times, swarm retrieval can be more precarious and can involve climbing a tree and cutting down a branch.

In the end, you want to raise a colony with a good queen that can survive winters. Without a queen, a colony can't survive for long; she lays the eggs to produce the bees in the colony.

During Kiessling's first winter trying her hand at Darwinian beekeeping, only one of her colonies survived, so she took the queen out of the colony, so it could refresh. She moved the queen to a new hive to start an additional colony.

Another winter passed, and the queen's colony survived, so again, Kiessling found the queen and removed her to start a new colony.

Colony mortality also stems from the stresses that come with migratory beekeeping. Commercial honeybee colonies are trucked around the country, including to the Central Valley of California to pollinate almond fields, where they are overcrowded and exposed to pesticides. "They're moved into a slum-like situation, and it's a wonderful place for the Varroa parasite to move from highly infected colonies to other colonies and infect them," Seeley says.

Hobbyists have long modeled their ways after the practices of commercial beekeeping, such as housing bees in large hives close to other colonies, to maximize honey production. Seeley is seeing a shift in that mind-set, though. "There's an admiration for [commercial beekeepers], that they can manage so many, but there is this growing interest in hobby beekeepers for a kinder and gentler beekeeping," Seeley says.

"This approach is to be kind and respectful of the way they are adapted to live and allow them to live naturally, and thus let them use their survival tools." To do this, you must mimic their natural environment. For example, space out hives to prevent bees from drifting from one colony to another and to reduce the spread of disease. In nature, wild colonies are typically around 3/5 of a mile apart, but in a hobbyist's backyard, spacing hives great distances poses a challenge. "That's unrealistic for most beekeepers, unless you live in a rural place," Seeley says. In a suburban setting, Seeley recommends having just one or two hives, with at least 100 feet between colonies.

"You do the best you can," says Kiessling, who spaces her hives about 300 to 600 feet apart.



Other steps include roughening the interior walls of the hive by scratching the wood with a rasp or building the hive with rough-sawn lumber to encourage the production of propolis, a mixture of resins, beeswax and other materials made by the bees that boosts the colony's ability to fight bacterial and fungal infections. And use hives built from thick, insulated lumber placed high off the ground. Position them far from plants treated with insecticides and fungicides, and near wetlands, forests and fields, where they can gather different kinds of pollen and have access to clean water.

Also house colonies in small hives that mimic the size of a natural nest cavity. That way, the colony becomes overcrowded in spring, forcing bees to swarm, which creates a chain of beneficial effects: For a few weeks, the colony doesn't have young bees that the Varroa mite can infect, and the colony can refresh itself, creating a new queen.

"Rejoice when they swarm, and don't think of it as a setback," Seeley says. "In most beekeeping, historically, that would be a failure. You are losing your workforce and honey crop. Be satisfied with a small crop of honey."



Kees Smans / Getty Images

Master Beekeeper program adds groundbreaking Spanish-language track as it celebrates 10th year

OSU Publication edited for length

CORVALLIS, Ore. – Two years ago, Elva Webster knew nothing about bees. Now she’s on her way to tending her own hives as she progresses through a groundbreaking Spanish-language version of a Master Beekeepers program.

The Oregon State University Extension Service’s Master Beekeepers program, which celebrates its 10th anniversary this year, added the Spanish track in 2020. It offers the same classes, which teach science-based beekeeping techniques to participants who start out at the apprentice level with a mentor, work through

a journey level and progress to the prestigious level of Master Beekeeper.

Carolyn Breece, faculty research assistant and coordinator of the Spanish-language version of Master Beekeepers, said it's the first program of its kind in the United States. The need for such a program became clear during an OSU beekeeping workshop for commercial beekeepers and crews. As the day went on, she noticed Latino crew members bunched together talking in their first language.

"When trying to translate information in your head to a different language it's a lot more work," Breece said. "The benefit of having the class in their native language is that they can relax and talk to each other. It's a much better experience and the response has been really positive. Participants are engaged. They are very happy to be there learning about bees."

Participants join for multiple reasons – to join a crew, make their own honey or just for the fascination of bees. But there was no formal training for Spanish-speakers interested in beekeeping. That's why Breece stepped in, aided by a team of colleagues and supported by Jen Larsen, who coordinates Oregon's Master Beekeepers.

"One of the areas in which the Master Beekeeper program shines is our mission to provide an in-depth, beginner-level educational experience to beekeepers all around our region," Larsen said. "Now, with our ability to transmit this information to Spanish-speaking beekeepers, we have filled a gap in our reach that was badly needed. I am so excited to see where this goes, and how we can grow the number of offerings we can provide in Spanish."

Hives in mind

Webster, who has worked through the first level, is the garden and community engagement coordinator at Huerto de la Familia. The Family Garden, a Lane County nonprofit that provides opportunities and training in organic agriculture and business creation to Spanish-speaking families.

She helps manage the organization's six community gardens and looks forward to the time she will be managing the volunteer-tended hives. Webster will be passing on the knowledge she learns to gardeners who long for space and gardening education so they can grow the food they ate in their home countries.

"A lot of our Spanish-speaking people are from different countries," said Webster, who is from Morelia, Michoacan, Mexico. "Some are from Guatemala, El Salvador or Mexico, from small communities and love to grow their own vegetables. They eat different foods and need information in the language they are most familiar with."

Webster and 13 others took part in three hands-on workshops in the apiary at the OSU Honey Bee Lab. The first of three workshops needed to complete the course was held on a gorgeous day in May, Breece said. Participants suited up to learn the basics of spring beekeeping – how to spot a queen, how to handle a frame and how to inspect for health and well-being.

The ins and outs of summer management and honey production, a favorite of the class, came second while overwintering colonies and honeybee diseases rounded out the program. Next up is the journey level where participants are expected to do community service like teaching a class and complete independent learning

assignments. Moving up to Master Beekeeper takes a lot of initiative. Participants must review a research paper and give a presentation.

It's a rigorous program. Out of 2,319 students enrolled since 2012, only seven have reached Certified Master Level Student.

Breece plans to continue the Spanish-language training into 2023 with the addition of a commercial beekeeper workshop in Spanish.

Ramesh Sagili, professor of apiculture and honeybee Extension specialist in the College of Agricultural Sciences, said that that Spanish-speaking clientele interested in beekeeping has steadily increased and the Latino workforce is playing a vital role in the success of commercial beekeeping operations.

“Until now there had been no formal training programs to meet the needs of this critical group,” Sagili said. “With our new Spanish version of Oregon Master Beekeeper program, we envision meeting this growing demand with the goal of promoting honeybee health and fostering inclusivity and diversity in the beekeeping community and industry.”



Club Info

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