



CENTRAL COAST BEEKEEPERS NEWSLETTER

February 2023

Issue number 78

NEXT MEETING February 22, 2023

February 22nd Meeting at the Library

Our February meeting will be on Wednesday, February 22, from 1:30-3:30PM at the Newport Public Library.

PRESIDENT'S MESSAGE

By Pat Wackford

This month we will discuss ways to keep mite levels down going into spring.

Also, we will explore how to replace queens and methods to introduce a new queen into a colony. The club has queen confinement cages for sale for \$15.

Did you lose a hive? We have several club members who can perform an autopsy on a brood frame from the dead out. Bring the frame in a plastic bag to prevent cross contamination.

The last chance to get your bee packages and nucs and queens ordered is March 10th for paid members only. Contact Becca with your order at rfain18@gmail.com

The Club still needs to fill the positions of President and Vice President. Please consider volunteering for one of these roles. Your club needs you!



2023 Membership Dues

The club will once again offer members discounts on bees and will coordinate delivery. Your club dues must be up to date to receive the discount. Club dues remain at \$15 for individuals and \$25 per family and are due at the beginning of the year. You can pay via bank transfer, PayPal (using our email centralcoastbeekeepers@gmail.com) or check sent to CCBA at PO Box 1916, Newport, OR 97365. No additional paperwork is needed for renewing members.

You may also want to consider supporting OSBA. Members can join for \$40 a year. The club benefits from your affiliation with the OSBA such as matching donations to the USU Bee Lab and liability insurance for events.



POLLINATOR PARADISE ON YOUR CAR

Featuring two of Oregon's most iconic bees, the managed honeybee and the wild yellow-faced bumble bee, the *Pollinator Paradise License Plate* is designed to showcase the unique Oregon landscape of natural areas, agricultural fields, and backyard gardens that help support the state's over 600 species of bees. The plate design centers around a field of red clover – a majestic sight that can be found dotting the rolling hills of Oregon's Willamette and Grande Ronde valleys. Oregon produces over a quarter of the U.S. supply of red clover seed. Both managed and wild bees pollinate this crop. The nectar and pollen, in turn, is a key food source for bees. This same interrelationship can be seen in every corner of the state, in coastal cranberry bogs, Rogue Valley pear orchards, high desert carrot seed fields, Columbia River Gorge sweet cherry orchards and Hermiston melon fields. Purchase a *Pollinator Paradise* pre-sale voucher today and help support the bees of Oregon by supporting bee research!



Marek Stanton created the artwork for the new custom Oregon pollinator license plate.

Credit Ellen Silva

Hive Clean Up for Dead Outs

by Ken Ograin

Finding a dead hive is discouraging, but bees do die. Don't give up! Try and learn from this experience.

If you do discover a dead hive you will need to deal with it as soon as possible. If you leave it unattended, you will have a bigger mess on your hands. The decaying bee carcasses stink and draw in other pests. Wax moth can ravage comb that you may want to salvage and destroy the wooden ware. Your empty hive may get robbed of any honey left by other bees and yellow jackets.

Any honey that is left behind should be stored in the freezer if you plan on using it. You can also extract it and use for bee feed. If your hive died over the winter the most common cause is varroa. Other causes are starvation, condensation or viruses. Be aware that before you use the comb or honey left from a dead out you will want to assess why the bees died and make sure it was not from a contagious disease that you will then spread to other hives when you use the salvaged comb or honey stores. Reusing resources from a hive that died from varroa, starvation or moisture is generally not a problem.

A great informative video to watch is "Why Did My Bees Die?" from Michigan State University. All beekeepers should view this one.

Clean Up

- First, remove the dead hive from the bee yard as soon as practical. Any honey left in the dead out is an invitation for robbing. Also, moisture will also likely build up inside which encourages mold and fermenting honey.
- Take out the frames and bang them against a board or table to dislodge the dead bees. Using your hive tool scrape the burr comb off the top, sides, bottom and ears of the frame. Freeze frames for a minimum of 72 hours and then store in bee-tight containers or store in a bee-tight container with paramoth. The comb, honey and frames may be used in the hive again giving bees a head start on colony building. Any frames with honey should be stored in the freezer until you are ready to use them. If you see grey mold on your frames the bees can clean that up, but if it's black mold, remove the foundation and throw it away. Clean the frames thoroughly, air out, freeze and reuse. If your frames have a minor infestation of wax moths, remove larvae, clean out all the webs, and be sure to

freeze everything for a minimum of 72 hours to kill all stages of wax moth or store in air-tight container with paramoth. Any uncapped honey frames or observed moisture can and will ferment, which will be toxic to bees. If you smell alcohol, it's fermented. Do not use!

- Next scrape and clean the empty brood and honey super boxes, bottom boards, top covers and inner covers with a soapy solution, rinse well, then using bleach water do a final wash and let air dry before storing. Mix bleach to water at 3 tablespoons to a gallon of water. Remove old comb from your hive on a regular basis. Old comb contains pesticide residue and pathogens and can adversely affect the health of your hive. If you can't see thru the comb when holding the frame up in sunlight, it's time to discard the old comb. Old comb can be used in swarm traps.



These 8 winter-blooming plants give bees needed nourishment

CORVALLIS, Ore. – Bees and other pollinators out and about during the dark days of winter look to gardeners for the nourishment that keeps them going until the more abundant seasons of the year arrive.

“Black-tailed bumblebees are out as early as January,” said Andony Melathopoulos, a bee specialist with Oregon State University Extension Service. “Native bees are just starting and will be seen more often later in February when the wild willow starts blooming.”

Though there are winter-flowering plants growing in the wild, many pollinators don’t live anywhere near them. That makes using cultivated winter bloomers an important consideration when planning a garden.

“Even a small amount of habitat will sustain bees, even rare species,” Melathopoulos said. “These are tiny creatures. Well-thought-out landscapes can provide all the food they need in winter. Gardeners can really help with that.”

Granted, there aren’t that many plants that flower in winter, but what’s out there adds much-needed brightness to the garden and sustenance for pollinators. Melathopoulos suggested the following winter-blooming plants.

Brassicas (broccoli, cauliflower, cabbage, mustard): If left to bloom into winter (which they will), your brassica crops will attract a bevy of bees.

Hazelnut (Corylus): Members of the *Corylus* genus – including the popular contorted and weeping hazelnuts – are one of the earliest sources of pollen for bees.

Oregon grape (Mahonia): No garden – or bee – should be without one of these evergreen shrubs, especially since it's designated Oregon's state flower. But an even better reason are the insanely yellow flowers that last for weeks.

Heath and heather (Erica and Calluna): Bees zoom in to heaths and heathers like they're approaching a runway. In shades from purple to copper to gold, these low-growing plants make a mat of color throughout the year, including winter.

Winter jasmine (Jasminum nudiflora): Though it doesn't have the fragrance of other jasmines, this vining shrub has bright yellow flowers that are a welcome sight in winter.

Burkwood viburnum (Viburnum x burkwoodii): The burke Viburnum is best known for the clusters of fragrant white blooms that bees find irresistible.

Sweet box (Sarcococcus confusa): It's not the inconspicuous wispy white flowers that draw attention in deepest winter, it's the waft of fragrance that attracts both people and bees.

Witch hazel (Hamamelis): Bees get fired up over witch hazel with its crepe-pepperlike flowers in colors of orange, red and, most famously, yellow.



Saint Valentine- Patron Saint of Beekeepers and Lovers

From Glory Bee

8

Thy love is sweeter than honey

Throughout history, honeybees have been associated with love. Myths from ancient Egypt and Greece highlight the powerful romantic effect bees have on humans—from cupid dipping his arrows in honey, to Ra, the sun god's tears becoming bees and helping him woo back his lost love.

In some cultures, before a wedding, the bride and groom to-be walk through a swarm of bees—if neither of them is stung, then their love is meant to be. And honey is thought by many to be a powerful “love potion”, encouraging feelings of attraction and romance.

Protector of Beekeepers

Bees symbolize love and beekeepers symbolize the protection of marriage and family. By managing their hives and caring for their bees, beekeepers ensure that their bee colonies flourish and the honey continues its sweet flow. Keeping bees is a special calling- it requires scientific know-how, but also requires a kind and gentle heart. To protect these protectors of bees, St. Valentine was made the patron saint of Beekeepers in 496A.D.

St. Valentine lived in the third century, when the Roman Empire was still flourishing. Legends say the Roman Emperor banned marriages because he thought single men made better soldiers. Valentine was found guilty of secretly marrying couples. While in jail, awaiting his execution, he began to convert his jailers to Christianity. To prove his faith, the head-jailer asked Valentine to heal his blind daughter, which Valentine did by praying with his hands over her eyes. After his execution, a letter was found in his cell, addressed to the jailers daughter—it was signed “your Valentine”.

St. Valentine is believed by many to aid those who call on his intercession to help ensure the sweetness of the season’s honey and provide special protection to those who keep bees. His feast day is February 14, which is the day he was executed.



Here is What’s Happening to US Honeybees

What’s behind the widespread loss of honeybee colonies? A new study has some answers.

By Melissa Breyer

Back in the winter of 2006, beekeepers in the United States began reporting startling losses of up to 90% of their hives. “As many as 50% of all affected colonies demonstrated symptoms inconsistent with any known causes of honey bee death,” [notes](#) the U.S. Department of Agriculture, For years, “[colony collapse disorder](#)” and the loss of honey bees (*Apis mellifera*) made regular headlines—and with good reason. More than 30% of the food we eat in the United States comes from crops pollinated by

honeybees. Remove honeybees from the pollination equation and things start to decline rapidly.

While the media attention to the problem has waned, the problem itself has not disappeared. In a 2020 study, researchers found that between April 2019 and April 2020, there was a [43% colony loss](#) in honey bees across the United States. Scientists have been unable to find one specific cause—according to a new study led by Penn State, the drivers of this pervasive phenomenon “are still an open matter of investigation.”

But now, after a comprehensive analysis of data from the last five years, the Penn State study offers insight into what is killing the bees. Using novel statistical methods, the study is the first to concurrently look at a mix of honeybee stressors at a national scale.

Honeybee Loss Has Multiple Causes

“Honeybees are vital pollinators for more than 100 species of crops in the United States, and the widespread loss of honey bee colonies is increasingly concerning,” said Luca Insolia, first author of the Penn State study, “Some previous studies have explored several potential stressors related to colony loss in a detailed way but are limited to narrow, regional areas. The one study that we know of at the national level in the United States explored only a single potential stressor. For this study, we integrated many large datasets at different spatial and temporal resolutions and used new, sophisticated statistical methods to assess several potential stressors associated with colony collapse across the U.S.”

The findings show that “honey bee colony loss in the U.S. over the last five years is primarily related to the presence of parasitic mites, extreme weather events, nearby pesticides, as well as challenges with overwintering,” writes Gail McCormick in a [press statement](#) for the study.

Behind the research was a dynamic combination of scientists which included statisticians, geographers, and entomologists. They looked at publicly available data collected between 2015 and 2021 on honeybee colonies, land use, weather, and other potential stressors. “Because these data came from a variety of sources, they varied in resolution over both space and time,” notes McCormick.

“In order to analyze the data all together, we had to come up with a technique to match the resolution of the various data sources,” said Martina Calovi, corresponding author of the study and currently associate professor of geography at the Norwegian University of Science and Technology. “We could have just taken an average of all the weather measurements we had within a state, but that boils all the information we have into one number and loses a lot of information, especially about any extreme values. In addition to averaging weather data, we used an ‘upscaling’ technique to summarize the data in several different ways, which allowed us to retain more information, including about the frequency of extreme temperature and precipitation events.”

With sophisticated statistical modeling techniques, they were able to assess a large number of potential stressors at the same time.

They found that more than one stressor affected honeybee colony loss across the country, including the presence of pesticides—no surprise, given that the goal of pesticides is to kill insects—frequent extreme weather events, and weather instability. Additionally, not surprising given previous evidence and research, bees were also impacted by the presence of the Harry Potteresque parasitic mites, *Varroa destructor*. At just 1.1 millimeters long, Varoa is one of the most troublesome pests of the honeybee and is causing concern to beekeepers throughout the world.

Honeybees Can't Walk Straight After Pesticide Exposure

The study also points out that in some states, but not all, losses happened between January and March, which can be a challenging time for overwintering animals. For bees, not surviving the winter can be a sign of poor colony health.

“Our results largely reinforce what regional studies have observed and confirm that regional patterns around these stressors are actually more widespread,” said Insolia, who led the study as a visiting graduate Penn State statistics student and who is currently a postdoctoral researcher at the University of Geneva in Switzerland. A beekeeper himself, Insolia adds, “These results also inform actions that beekeepers could take to help

circumvent these stressors and protect their colonies, including treatments for the Varroa mite, especially in areas of weather instability. Beekeepers could also consider strategies to move their colonies to areas with high food availability or away from nearby pesticides or to provide supplementary food during certain seasons or months with frequent extreme weather events.”

When colony collapse disorder first came to rise, we all anticipated a single smoking gun. But the modern world is a complicated place and human folly is taxing the animal and plant worlds in unprecedented ways. And now, the onus is on beekeepers to protect bees from anthropogenic threats such as climate change and pesticide use.

“A changing climate and high-profile extreme weather events like Hurricane Ian—which threatened about 15% of the nation’s bees that were in its path as well as their food sources—are important reminders that we urgently need to better understand the stressors that are driving honeybee colony collapse and to develop strategies to mitigate them,” said Francesca Chiaromonte, a senior member of the research team.

“Our results highlight the role of parasitic mites, pesticide exposure, extreme weather events, and overwintering in bee colony collapse. We hope that they will help inform improved beekeeping practices and direct future data collection efforts that allow us to understand the problem at finer and finer resolutions.”

The study was [published online in the journal Scientific Reports](#).



Club Info

Visit our website at: <https://www.ccbaor.org/>

Address: POB 1916 Newport, OR 97365

Email: centralcoastbeekeepers@gmail.com

facebook: [CCBA meta](#)
