

CENTRAL COAST BEEKEEPERS NEWSLETTER

ISSUE NUMBER 66

NEXT MEETING JANUARY 26, 2022

January 2022

# In-person Meeting at Newport Library January 26<sup>th</sup> at 2:00PM

Please join us for our first in-person meeting in over a year at the Newport Library. At the meeting we will be doing some diagnostic work. Any club member whose hives died this winter can bring in a frame of dead brood and one of our experts will try to determine the cause of the failure. Frames need to be secure in a plastic bag and will be handled with exam gloves, to prevent spread of possible infections such as EFB and AFB. In addition, we will be discussing what needs to be done to prepare your hives for spring. There are a few other items on the agenda, so make sure to join the meeting.

We look forward to seeing you on Wednesday, January 26<sup>th</sup> at 2:00PM.



## PRESIDENT'S MESSAGE By Pat Wackford

I hope all of you are all doing well at the beginning of this New Year.

I successfully got all three of my hives through to this point. Last Sunday, the 9<sup>th</sup>, bees were out and about flying and some were bringing in small amounts of pollen. I do not have any vegetation blooming on the property but noticed the catkins on Alder trees have appeared. t was good to see the bees. I've been changing out towels in the moisture box every couple of weeks and cleaning dead bees from the bottom boards. One hive was large going into winter and many bees died and blocked the entrance. I left a lot of honey on the hives and when lifting them they still felt fairly heavy. If your hives feel light, it is time to feed them dry sugar, fondant or winter pollen patties. The queen usually begins laying in January and the hive will need stores and pollen to raise the new bees. I can't wait until warmer temperatures to do a quick inspection. Winter is a good time to check through your equipment, paint supers, and inspect frames to see if they need to be replaced. Wax moths can cause major damage to stored frames.

Our next meeting will be Wednesday January 26<sup>th</sup> at the Newport Library at 2PM.The Library requires that masks be worn. Bring your ideas for what you would like to do this year. We will be meeting every other month, so please feel free to contact me between meetings with ideas.

Please remember to pay your Club dues for 2022. They are \$15 per individual and \$25 per household.



## **Best Beekeeping Apps for Apiarists**

**By Backyard Beekeeping** Edited and updated

Using an app can be a great way to manage your hives.

#### BeeKeeperLite (free)

This app is a great inspection assistant. It allows you to record the details of each colony.

Without having to type out any words, you can quickly record the temperament of the girls, the presence of brood, and the presence of the queen, either evidenced by eggs or by seeing her. You just need to tap your screen, and you have a very comprehensive record of your inspection.

The records tab will act as a checklist, reminding you to check for all the vital signs of your colony's health and wellbeing.

For instance, is your queen marked? This would be especially useful after the swarming season. Sometimes you can do everything right, and the colony still swarms.

If you've noticed a difference in the behavior of the colony, it may be time to check for the queen. A quick glance at the checklist will remind you to look for your queen and check if your marked queen is still in control.

As a beginner, it's usually advisable to begin with at least 2 colonies. Since the app allows you to record the strain of bees that you have, you can compare and contrast their performance. Among other beekeeping apps, this one is a quick tool to use on the go.

The developers of the app respond to queries and complaints should you have any.

#### Hive Tracks Mobile App (free)

**If your apiary is someplace outside in the wilderness, then this app is definitely for you.** The recording is done offline, so you don't need to worry about cell service and Wi-Fi signals. It keeps a record of your hives based on the GPS coordinates that don't need cell service to work.

Once you're at the apiary, you can utilize your hands to get the job done as you make an audio record of your visit. That makes it so much easier to capture all the vital information, and you have fewer items to juggle during your inspection visits. If you see something particularly significant, you can just take a picture and then continue with your audio recording.

Once you're back within range, the app will upload your information and merge it with the account previously set up. It's quite simple to use.

#### Bee Health App (free)

There's no doubt that bees are under attack by...us. Well, perhaps to be more precise, we have created an environment that is wiping them out at an alarming rate. By moving colonies across the world, we have exposed them to pests and diseases they are not equipped to deal with.

Part of the problem is a lack of information. In order to help the bees, we need a better understanding of the challenges they face and the treatment options for them. This free app is just what beekeepers need.

It's great for beginners who are just starting out. The first year of beekeeping is really difficult. There's so much information to keep in mind. A century ago, beekeeping was simple. All you have to do is place the hives at a convenient place and let the bees do all the work.

Now, you need to worry about mites, monitoring their numbers, and rotating treatments. You need to worry about diseases that affect brood and how to prevent them. You need to learn to diagnose diseases affecting adult bees.

All this is greatly aided by this app that is a handy reference tool. It has pictures of the various pests and diseases you may encounter, with updated scientific information on treatment options.

Information is a must-have in your beekeeping kit. This definitely is one of the best and free beekeeping apps.

#### Apiary Book (free)

One look at this application, and you can tell that there is definitely a beekeeper behind this app.

There are lots of people who are content to keep their records the old-fashioned way. Pen and paper never really go out of style, but they have challenges. One of them is that analyzing trends, especially over a period of years, can be taxing. I reserve that energy for doing my taxes.

This comprehensive app allows you to record every single aspect of beekeeping.

From queen genetics and age to colony movements, the app has been developed to capture all the vital information you need to build healthy colonies long term.

There is even an assistant on the app to help the beginner with basic information.

The capacity of the app is such that it will accommodate your growth. You can add apiaries and hives as your hobby or business grows.

Another valuable feature is the reminders offered by this app.

Sometimes you have a hive that is set up separately from the others. Out of sight, out of mind. When you're just beginning, you would think that this is an unlikely scenario, but as you expand, sometimes a few things slip your mind. This will help to remind you to look in on that lone ranger colony to keep them healthy.

#### BeePlus Beekeeping Manager (\$4.99)

This is a fantastic app available on the apple app store.

Remember everything you used to put down in your notebook? It's all here, and they've even added some information that you may have forgotten to include.

For instance, how often do you note down the weather on the day of inspection? This may seem whimsical, and you may set this aside for the poetic beekeeper, but it has scientific weight.

If the bees appear more aggressive than usual, there is the temptation to quickly blame genetics and seek to requeen the hive.

But why not go back to your records and look at your previous inspections.

What was the weather like that day? You might notice that their testiness was caused by excessive humidity. Once you've given them a week or two and you get a break in the weather, you may inspect them and find they are the calm girls you have grown to love.

It's also a great tool for tracking your bee equipment, for instance, supers. You can quickly scan your records and establish how many supers you need to add for nectar flow.

You have unique QR codes for the hives, and the app has the capacity to allow pictorial records of your hive visits. If you are an Apple product user, this is a great app to have for your beekeeping activities.

#### Bee Appy – Hive Management (\$3.99)

I'll go straight to my favorite feature on this app. That's the feedback channel they use.

How many times have you used an app and thought, does whoever built this know anything about what the real-world scenario is?

Well, the Bee Appy people have thought this part through, and using Trello, ensure that you can provide valuable information on the features you the most value on the app as they continue to improve it.

In addition to that, it provides you with all the things that a helpful inspection tool does.

An easy-to-follow checklist is the cornerstone of any beekeeper, and the app simplifies this so that data entry comes down to just a few seconds.

This is a great app to have as both a beginner and a seasoned beekeeper.

#### Conclusion

These beekeeping apps should make your work easier.

If you work gloveless, then it's easy to go with an app that allows you to tap into your findings. If you would prefer to keep your hands gloved, then a voice-activated option would be better for you.

Let's not forget that even though an app does not allow you to record information, it can still be valuable because it provides you with information.

The beauty of these beekeeping apps is that you do not need to limit yourself to just one. As long as you find it useful, why not try it.



### Pollen Trapping: What to Think About Before You Start

Shelley Hoover, University of Lethbridge, Lethbridge, Alberta

Bees need pollen; whereas honey provides bees with the carbohydrate or sugar component of their diet, pollen provides the essential protein, vitamin, mineral, and fat components. The amount of pollen coming into a colony directly impacts how much brood it can rear, which is related to population and ultimately colony survival.

Bees consume the stored pollen or bee bread very quickly. Because honey bees do not store vast quantities of pollen as they do nectar, they are not well buffered against environmental fluctuations like they are for honey, and, after only a few days of pollen dearth, they will start to cannibalize the young brood. Whereas nectar foraging is largely regulated by external variables (nectar quality and floral availability), bees actively regulate pollen foraging according to internal colony variables (their need to feed brood). Diminishing the amount of pollen in a colony (removing bee bread in comb), reducing the incoming (via trapping), or increasing need (adding brood), promptly result in adjustments to foraging effort (within the hour).

There are many factors a beekeeper should consider before deciding to trap pollen. To start: Why am I interested in pollen trapping? What traps should I use? What will work with my equipment? How will it affect my bees? How will it affect my other beekeeping goals? When should I trap pollen? Where? If I plan to sell pollen, how will I clean/store/market it? Under what conditions would I make money? What do my customers want?

There are many styles of trap, but primary considerations should be the cleanliness of the pollen produced, whether it will restrict the entrances, and whether it will work with your equipment. Most styles require you to take apart the hive and place the trap under the brood chambers, but there are front-mounting "porch" style traps. While they restrict the entrance more, and the pollen is more likely to be wet or contain debris, these are easily put on and taken off without much effort. If your hive equipment is old, you may need to tape gaps and holes, or be creative about making sure there are no gaps by which the bees can bypass the trap.

While pollen trapping full time for extended periods can inhibit colony growth and honey production, many studies have shown that short-term trapping during a pollen flow has little negative consequences on the colony. Because colonies with pollen traps in place are not getting as much pollen as they would without the pollen trap, they will recruit more pollen foragers. Studies have shown that colonies with pollen traps have greater numbers of pollen foragers. If you are pollinating a crop for which the most effective pollinator is pollen foragers (as opposed to nectar foragers, which is most nonhybrid crops), pollen trapping may increase the pollination service your bees are performing, and may fit well with a pollination contract. In canola pollination, we found no effect of pollen trapping on brood production after 24 days of continuous trapping. We did, however, see a decrease in honey production from 40 pounds to 27 pounds (this was a low-production year due to smoke from wildfires).

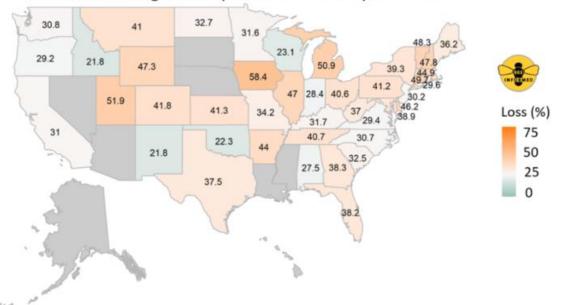
Beekeepers trap pollen primarily for two reasons—to consume (by them or their bees!) or to sell. If you plan to feed the pollen to your bees, your primary consideration should be biosecurity—do not feed pollen from colonies with any sign of disease to another colony. In general, beekeepers can generate more revenue from a mix of pollen and honey sales, but it depends on the prices of the two commodities. In addition, beekeepers must incorporate the cost of pollen trapping into their profit calculations. If you sell hive products, how do you sell? Do you sell barrels of honey in bulk to honey packers that want consistent product, or do you sell at local markets where your customers want a variety of seasonal products? Overall, the profitability of pollen trapping depends on many factors that include: The price of honey, the price of pollen, the cost to collect honey, the cost to collect/clean/store pollen, and the amount of pollen/honey collected.

To make the most of your effort, only trap high-yielding colonies. Our research has shown that colonies that are high yielding tend to stay that way over the season, and the same for low yielding colonies. This makes sense, as other research has shown a strong genetic component to the propensity to forage for pollen. In addition, only trap when there is a pollen flow. This is best for the health of the colony, but it also ensures you do not spend your time emptying empty pollen traps. Maximize your efficiency by considering trap design, number of traps, number of apiary visits, and how you will clean and dry your pollen. Target your pollen trapping to your biggest colonies with the best pollen flow.



## 2020-2021 Colony Loss and Management Survey

2020-2021 Managed Honey Bee Winter Colony Loss Rates



From Bee Informed: The 2020-21 Loss & Management Survey received 3,347 respondents who collectively manage 192,384 colonies, representing approximately 7% of the estimated 2.71 million US honey-producing colonies (USDA NASS, 2021). Survey results show that beekeepers experienced 32.2% winter losses this year (9.6%higher than last year), and 45.5% annual losses, which is up 1.8% from 2019-20, and is the second highest annual loss rates on record. These numbers continue to be cause for concern, and highlights the critical importance of the survey that allows BIP to track the health and survival rates for US honey bee colonies. Sign up for BIP's Blogs and Receive Loss and Management Survey Results!



# Honeybees use propolis as a natural pesticide against their major ectoparasite

Michelina Pusceddu, Desiderato Annoscia et all

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https://doi.org/10.1098/rspb.2021.2101 to read full research paper

Honeybees use propolis collected from plants for coating the inner walls of their nest. This substance is also used as a natural antibiotic against microbial pathogens, similarly to many other animals exploiting natural products for self-medication. We carried out chemical analyses and laboratory bioassays to test if honeybees use propolis for social medication against their major ectoparasite: *Varroa destructor*. We found that propolis is applied to brood cells where it can affect the reproducing parasites, with a positive effect on honeybees and a potential impact on *Varroa* population. We conclude that propolis can be regarded as a natural pesticide used by the honeybee to limit a dangerous parasite. These findings significantly enlarge our understanding of behavioral immunity in animals and may have important implications for the management of the most important threat to honeybees worldwide.



### **Club Info**

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