

## CENTRAL COAST BEEKEEPERS NEWSLETTER

March 2022

ssue number 68 NEXT MEETING March 23<sup>rd</sup> 2022

## March 23<sup>rd</sup> In-Person Club Meeting

We will be meeting at the Newport Library at 2:00 on Wednesday, March 23rd.

In addition to regular club business, we will be discussing hive inspections, mite treatments and swarm season. Topics are for the full range of experience from new beekeepers to the very experienced. We hope to see you there!

## PRESIDENT'S MESSAGE

## By Pat Wackford

The Bee-ginning Beekeeping Class at OCCC was well attended with 30 people all interested in finding out more about honey bees. The instructors were Becca, Jim, Max, Judi, Jacob and myself. Topics covered included Bee Vocabulary, Equipment, Protective Gear, and Management. A number of students joined or were interested in joining our club. There will be an in-depth report at the meeting.

On March 16<sup>th</sup> I will be having knee surgery and will not be able to attend this month's meeting. Vice President Jim Parish will Chair the meeting. I have provided him an agenda. There are several events coming up and I hope we have a number of club members who will volunteer to represent our club.

So far I still have three hives making their way through this wet, extended winter. When I took a quick look at the top box of frames, I saw many new bees feeding on the sugar patties. I'm glad to see the queens are lying. During warmer days the foragers are out bringing in what pollen they can find. Hope all of you have had some success with your bees thus far.

Mask mandates have ended for indoor gatherings, but I do not know what the Newport Library will require. So bring a mask with you just in case.



## **CCBA Library**

One of the benefits of being a club member is that you can borrow from our library of books which can be checked out and returned for others to enjoy. We also give away beekeeping journals and other print material.

We have a couple of books that were checked out, but that were not returned. If you have either or both of these books, please return them (or you can donate them if you have copies) and we will happily take them back – no questions asked!

### Beekeeper's Lab

### All about Beekeeping and Honey



## **Spring Mistakes**

From Lane County Beekeepers

**Not Feeding Enough in Early Spring:** One of the first spring mistakes is starvation, caused by not feeding enough early in the season. Bees are bringing in pollen and nectar now and should be OK. Don't stop hefting your hive, as weak hives with low population may need feeding stimulation.

**Not Testing for Varroa Mites:** The second mistake that comes to mind is not testing or treating early enough in the season for varroa mites. In the past, trying to catch the first honey flow while properly timing mite treatments can be difficult.

**Not Treating European Foulbrood Early Enough:** Another early spring mistake is not reacting quickly enough when a brood disease breaks out. You can treat with antibiotics when tests show positive for European Foulbrood. American Foulbrood, however, is another story. Burn that hive as quick as you can if it tests positive for American Foulbrood. If you suspect either form of the disease, contact the USDA Bee Research Laboratory in Beltsville, Maryland right away. https://www.ars.usda.gov/northeast-area/beltsville-md-barc/beltsville-agricultural-research-center/bee-researchlaboratory/docs/how-to-submit-samples/

Not Having Extra Hives Ready for Swarms, Nucs, Splits or Package Bees: Be prepared by having additional complete hives so they're ready to go for those unexpected swarms. Make sure you have your boxes ready ahead of time so you can quickly transfer them into their new home. Same goes for package bees, nucs, or splits. Take the time to prepare extra hive equipment now before you need it - you'll be happy you did.

**Not Rotating Boxes in Spring:** Last, but certainly not least, is the rotation of your boxes. You need to reverse your brood boxes in the spring if the cluster has moved up and the bottom box is empty. This helps provide additional room for the queen to lay, thereby increasing the colony's population for the first nectar flow.

## **Hey New Beekeepers....**

Things to do to start preparing for your bees:

- 1. Order your bees.
- 2. Get your apiary site ready.
- 3. Assemble your boxes and other equipment.
- 4. Tools gather all your tools and have them in a container. A five-gallon bucket works really well.
- 5. Practice lighting your smoker. Even experienced beekeepers can find it difficult sometimes.



## OCCC Bee-ginning Beekeepers Course

Our first beginning beekeeper course at OCCC on March 9<sup>th</sup> was a big success. We had maximum sign-ups of 30 students and the attendees' feedback has been very positive. Many thanks to Pat Wackford, Jim Parrish, Judi Irving, Becca Fain, Max Kuhn and Jacob Helm who made up the instructor panel. We already added a new member and we piqued the interest of many others who we hope will join in the near future.

# Hundreds of new native bee species added to Oregon database

By Monica Samayoa (OPB)

The Oregon Bee Atlas just got bigger.

In an update announced this month, the largest bee and plant database in the state added hundreds of new native bee species that were discovered all over the state.

The atlas was created because of a lack of information available about the state's bee populations. The program's scientists collect data from each county with help from trained volunteers who collect bee specimens. In the latest update, they added 224 unique bee species to their list from data collected in 2019, increasing the number of known native bees in Oregon to 650.



A native bee works a wildflower that emerged after the Douglas Complex Fire of 2013. *Jes Burns, OPB/EarthFix* 

Oregon Bee Atlas taxonomist Lincoln Best said most bees either live in smaller groups or by themselves and often visit just one plant species their whole lives. So, discovering new bees also means knowing which plants are important for their survival and where to focus conversation efforts.

"One of the greatest conservation actions you can have is either conserving plant populations and plant communities or by restoring areas that have been damaged with native plants," Best said. "So it is important which native plants you choose."

Best said it's likely there are hundreds of bees in the state that haven't been discovered yet. The more engagement and interest they get from volunteers and citizen scientists around the state, he said, the quicker they can gather and expand their data. For 2019, volunteers submitted 25,022 bee specimens across all Oregon counties.

The collection process includes capturing the bee, taking photos of where it was found and studying the specimen over the winter. Volunteers are trained to identify the bee species, document how it was collected and which plant it was attracted to, and then pin it down and label it like they did in 18th century insect collections, Best said.

"Oregon is kind of at the forefront of these types of large, almost industrial scale biodiversity inventory and monitoring, and it's allowing us to share this infrastructure with other states and Canadian provinces," Best said.

Oregon State University Department of Integrative Biology curator Chris Marshall said while it takes time to go over each year's new data, having trained volunteers is essential. He said as more discoveries are made, the data become more refined.

"It's like comparing a grainy old Xeroxed photograph of a blurry photograph to a high-resolution color digital image," he said. "Each specimen is a pixel, one tiny observation but when you put them together, you can really begin to see the patterns of biodiversity and that's necessary for us to monitor its health."

Marshall said he hopes the data and its collection method will be helpful for other states and countries to begin their own datasets and share their information worldwide.

## Wild Bees Survive a Cold Winter

Until recently, experts considered it unlikely that the honeybee had survived as a wild animal in Europe. In a current study, biologists Benjamin Rutschmann and Patrick Kohl from Julius-Maximilians-Universität Würzburg (JMU) in Bavaria, Germany, show that wild honeybees still exist in the region of Galicia in the northwest of Spain.

The researchers describe where to find the bees' nests and under which conditions they can survive in *Biological Conservation*, a journal for conservation biology.

### 136 square kilometers searched for power poles

Rutschmann and Kohl are doctoral students at the JMU Chair of Animal Ecology and Tropical Biology in the group of Professor Ingolf Steffan-Dewenter.

They started their studies in Galicia in October 2019 at the suggestion of their Spanish colleague Alejandro Machado. The latter had observed swarms of honeybees occupying the inside of hollow electricity poles and apparently thriving there. In order to find out whether the region would support an entire population of wild bee colonies, the researchers searched a 136 square kilometer area for hollow power poles.

"We discovered 214 poles," says Rutschmann. For each one, the researchers checked if a honeybee colony lived inside. "In the first year of our investigation, we found 29 colonies." On a second visit in March 2020, they found that 17 of these colonies had survived the winter -- "even though they had neither been fed nor treated against parasites."

### Galician honeybees are not imported breeds

Now, it could have been that the wild honeybee colonies were the feral descendants of foreign honeybee strains imported by beekeepers. In Germany, according to Rutschmann, the native

honeybee subspecies (*Apis mellifera mellifera*) was displaced in this way a long time ago by imported subspecies, first and foremost by the Carnica bee (*A. m. carnica*).

But this was not the case in Galicia. By analyzing wing venation pattern the JMU researchers discovered that all the colonies living in power poles were members of the Iberian honeybee, *Apis mellifera iberiensis*. It is thus conceivable that in Spain the honeybee has existed both as a wild and as a livestock animal up to the present day. "Whether the population under study can be stable in the long term, however, must be shown by further years of observation," says Kohl.

#### First data on survival rates

"After two years of study and a total of 52 observed bee colonies, we see that around 40 percent of the colonies survive the winter," reports Alejandro Machado, who himself lives in the region. This is the first data ever reported on the survival rates of wild honeybee colonies in Europe.

An analysis of the landscape around the power poles showed that the survival of the Galician honeybees strongly depends on how natural the surroundings are. In power poles surrounded by shrubland, heathland or forests many more colonies survive the winter than in power poles located in intensively cultivated fields.

For colonies surrounded by more than 50 per cent semi-natural habitats, at least every second colony survived the winter. In contrast, in landscapes with less than 25 per cent semi-natural habitat and therefore little supply of food, the probability of survival was close to zero.

### Striking landscape contrasts in Galicia provided insights

In Galicia, the researchers found strong contrasts between contiguous semi-natural areas with no or traditional, extensive use (heathland, coppice) and large areas of intensive agriculture with high pesticide and fertilizer inputs.

"It was this stark contrast between quasi-nature and agricultural desert that made it possible for us to realize that the landscape context plays such an important role in the survival of honeybees," says Rutschmann.

The study shows the fundamental importance of extensive forms of land use and the restoration of near-natural landscape features such as hedgerows for insect conservation. "Without sufficient nesting and feeding habitats, even the banning of pesticides or the halt of climate change will not help insects," concludes Kohl.

### **Story Source:**

Materials provided by University of Würzburg. Note: Content may be edited for style and length.



## **Ode to a Spring Yellow**

Dr. Dewey M. Caron

Can you name a common yellow flower that grows prolifically just about everywhere both spring and fall and once the flower is pollinated, it develops a fluffy seed head that as a youngster you likely picked to blow the feathery remains into the breeze, after making a wish? Yes, I am describing the lowly dandelion (Taraxacum officinale).

A dandelion plant produces on average 15,000 seeds. By blowing on the seed flower head, we are enablers, helping disperse the 150-200 seeds per flower. Even without our help, dandelion seeds can be dispersed long distances by wind updrafts. Once flowering is completed dandelion seeds are short lived so they must germinate quickly. They do not need a dormant period. Maybe you have seen the bumper sticker "Don't pick dandelions - Save the Honey Bee." Dandelions are an instantly recognizable plant that almost everyone is familiar with. Some consider them the first wildflower of spring. Beginner beekeepers are often surprised to learn dandelions lack vital amino acids and nutrients that bees require. Of the dozen amino acids that bees need in pollen (which they cannot synthetize in their bodies), dandelion pollen falls short in four of them: arginine, isoleucine, leucine, and valine.

My PhD student, Elton Herbert, found that honey bees fed dandelion pollen alone have little success at raising brood back in the 1970s. So unfortunately, dandelions, those familiar spring

weeds, are simply not a quality food source for bees – they are mediocre at best and they are not the first. Thankfully for our bees there are many other plants that bloom before or around the same time as dandelions, that in combination, help the bees fulfill their amino acid requirements. Even before they swarm, bees are "in the trees" to collect pollen from maples, elms, poplars and willow. Dandelions do still play a useful role to honey bees. With windy spring conditions, bees need to locate forage closer to the ground; lawns or parks blanketed with dandelions are accessible on such days. Peak nectar and pollen availability occurs in the morning hours from dandelions. The flowers close up in early afternoon and foragers then switch to other flower sources, insuring a bee smorgasbord.

A lawn full of dandelions is better for bees than a weed free lawn, but not nearly as good as a garden with a variety of plants. In contrast, if you're into health foods and an all-natural lifestyle, you likely love every part of the dandelion plant. A popular website, grow, forage, ferment, and cook https://www.growforagecookferment.com/ says it is not necessary to save dandelions for honey bees since they are plentiful. Although often treated as a weed, it's actually a perennial herb with a long list of culinary and medicinal uses. Dandelions are one of the best beginner plants for those who are new to food foraging. All parts of dandelion are edible and medicinal, from the flower, to the leaves, to the root. Many have heard of substituting the early leaves of the dandelion as a spring salad. The leaves might be bitter due to sesquiterpenes, the milky sap common in the hollow stem. (Hint: if dandelion greens are "too bitter" for your taste, consult Dr John Kallas's website of Portland's Wild Food Adventures https://www.backwoodshome.com/making-dandelions-palatable/ for some ways to dilute/ camouflage/neutralize the sesquiterpenes.) The boiled leaves make a tea that my French grandmother insisted we drink each spring to "purge" our system (and there is evidence it might help kidney and liver function). They have a delicate and sweet flavor. They are a good source of vitamins A, C, and K and are also a source of vitamin E, folate, iron, and calcium. They can be used to make dandelion jelly, soup, tea, and even dandelion mead. The dried flower heads can be turned into a salve for dry, cracked or sore, itchy skin. Like propolis, it can be diluted into a tincture for topical or interior use.

Note: False dandelion Hypochaeris radicata, aka (hairy) cat's ear, closely resembles the true dandelion. They do not have hollow stems like dandelion, the stems branch and their hairy leaves have deeper notches. Sometimes, another look-alike, Sow Thistle (Sonchus spp.) is confused for dandelion. It too lacks a hollow stem, has flowers growing at multiple sites from the stem and as a true thistle has leaves with prickly spines. Both "imposters" are also edible. Both, like dandelion, are mediocre pollen sources for bees. The lowly dandelion weed? Hardly. Good for our bees and for us!



FOR SALE: BEESWAX FOUNDATION, in 4 3/4" shallow size, 5 5/8" western size, and 6 5/8" semi-deep size. Available in a 12 1/2 - pound box for \$50.00 or in smaller amounts at \$5.00 per pound. These prices are about 50% of new catalog prices. ALSO FOR SALE: THREE BOTTOM-STYLE POLLEN TRAPS. Collection drawer slides out at front of hive. Used, in excellent condition, \$25 each. ALSO FOR SALE: Many of the expensive or hard to find parts needed to construct a beehive Loader, \$400.

Please call for details. Kenny Williams, (541) 456-2631 in Blodgett, OR.



### **Club Info**

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