

# The Voice of Professional and Backyard Beekeeping

# Cowlitz Beekeepers Association Newsletter



Dedicated to Preserving the Honey Bee through Community Action, Awareness and Education

January 2021

Issue 1

## Next Meeting:

**Where:** Anywhere worldwide on your computer via Zoom

**When:** January 21, 2021 7:00 PM

**Speaker:** Carolyn Breece

If you live in Longview or the surrounding area and already keep bees, intend to do so or are simply interested in this fascinating hobby, Cowlitz Beekeepers Association is the association for you. Even if you don't keep bees, joining us will help support our cause, our community action



**Carolyn Breece** has been at OSU since 2009 and is the senior faculty research assistant for the Oregon State University Honey Bee Lab. She studied mosquitos at the University of Oregon and bark beetles at Northern Arizona University. She is also a committee member, Journey student, and mentor for the Oregon Master Beekeeper Program. In addition to managing OSU's apiary of 60 colonies, she has 8 colonies of her own. She also enjoys searching for wild mushrooms, clamming and musseling, fishing, and hiking. She also does a little running.

She will teach us to identify diseases that could be at work weakening our hives. Then, we can effectively manage them back to health.

## Association Officers and Board:

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**Ken Curtis, Trustee** (360)261-2795



Executive Board will meet Monday Jan 14<sup>th</sup> at 6:30 PM via zoom. Any member may attend. Contact Bill for a zoom link.

## 2021 Membership Dues

<https://cowlitzbeekeeping.wixsite.com/website/registration> click this link, fill out the form, submit. Then send your check to the listed address. Thank you for supporting Cowlitz Beekeepers Association

## Honey Bees Use Animal Dung to Fend Off Asian Hornets

University of Guelph researchers have discovered honeybees in Vietnam collect and apply spots of animal dung around hive entrances to deter deadly nest raids by an Asian hornet. The researchers found that honeybees have developed a pre-emptive defense by collecting animal dung and applying it to hive entrances.








While working in Vietnam they noticed that some *A. cerana* hives had small spots dotted around the entrance, something not seen in North America. Beekeepers told him the bees added spots whenever giant hornets arrived; one noted he'd seen his bees collecting bits of water buffalo dung. To find out more, Mattila organized a research trip. "Every day we were making major progress and discoveries," she recalls.

Mattila sat in pigsties and chicken coops to confirm that honey bees were landing in poop. Then the researchers collected the dung of various kinds of animals from neighboring farms. They placed samples around the hives, captured bees on the dung, and painted their backs to confirm that those bees were bringing it back to the hives. They saw bees return to the same spot over and over, grasping the material and balling it up.

The hornets spent less than half as much time at nest entrances with moderate to heavy dung spotting as they did at hives with few spots, and they spent only one-tenth as much time chewing at the hive entrances to get at the bees' brood. They were also less likely to launch mass attacks on the more heavily spotted hives.

For a bee to do that is incredible," says Susan Cobey, a bee biologist at Washington State University, Pullman, who was not involved. "It just floored me."

### It's Winter. Below are some things that will help your bees survive it.

-  Add an upper entrance to vent excess moisture.
-  Insulate the top of your hive. Use a quilt board or solid foam board 1" to 2" thick.
-  The entrance should also be periodically checked to make sure it is not plugged with dead bees. The undertaker bees don't carry bodies out very far when it is cold and they can pile up at the entrance.
-  Check hive weight, and if light feed solid sugar.
-  Keep entrance small so mice don't foul your hive.

### Cowlitz Beekeepers Association Monthly Meeting December 17, 2020

Meeting came to order at 7:00 p.m.

No business for tonight, just went to hear the guest speaker.

In attendance: 41 to 45.

The Columbia County Beekeepers joined us for the meeting and helped sponsor our speaker.

Guest speaker was Randy Oliver. He talked about the different experiments that are being done with bees in California. There was a question-and-answer time afterward.

Meeting adjourned at 9:04 p.m.

Minutes taken by Zenobia Scott, Secretary

## Out in the Bee Yard

Bill Holmes

Any clear day over 45 degrees I can expect to see activity in front of my hives. I almost always take a walk out to see them enjoying a little sun. As you can see in the picture at right, I have a fence about 4 feet from the front of the hives. I was standing on the other side watching the activity when one of the bees just came up and stung me on the head. Whatever was she thinking?



On December 29<sup>th</sup> I treated all my hives with a shot of Oxalic vapor. It was 40 degrees out and all bees were home to get their mites removed. This should hopefully be the last treatment they will need until May and then we'll see what's going on with mite counts and decide on a course of action.

I checked hive weight a few days ago and they are dropping but slowly and most still have adequate honey stores. My September cutout in a single deep was now down to 35 pounds rear weight which after I double it, account for the woodenware, frames, and bees, I believe there is about 30 pounds of honey in the single deep. But, I don't know if all that is conveniently located so I decided to add some sugar. I made 4 pounds of no cook candy and put it into a mold 2" high by 17" long by 4" wide to dry overnight. There is a green 2" high spacer just above the purple hive box in the picture that has ½ inch hardware cloth on the bottom. It is divided into 3 chambers. The 2 outermost chambers have a layer of burlap which is covered with cedar shavings. The center section houses the candy brick. I cover that section with some plywood and weigh it down with whatever is laying around. Then I add another spacer box that is ventilated. When I need to check on the sugar I just take the outer cover off, remove the weights and then the plywood. It never disturbs the bees. It was 50 degrees and cloudy out when I opened the hive and it was only open long enough to take a picture and put the candy/quilt board in place. Though the amount of visible bees is small it suggests the cluster is now to the front of the hive and a little off center. But when I look closer at the picture, I see bees looking out from the frame labeled 2014. So, if they are clustered it is a very loose one. You can still see a couple of the rubber bands from the cutout operation. I am optimistic about this hives chances.



After that final mite treatment and then keeping a check on hive weight, there isn't a lot left to do. Some like to sweep the bottom board with a hive tool or metal coat hanger or even a small shrub branch. I have rarely performed that task. I watch the hives and if they are flying from the bottom entrance then I assume it's clear and I have never had one get so thick with dead bees that they were stuck inside. I believe I would have worse problems with that hive. Another check is the quilt board if you are using one. Just check to make sure the burlap and chips are dry and not soggy. You may have to change out materials. You should take records on all your visits.

Any time it is over 40 degrees you can pick up the outer cover and take a peek at the inner cover and look for moisture or mold. Then put the lid back on and don't forget to weigh it down. Blowing rain has cleaned out many hives when the top flew off. Bill



## Early Spring Trees for the Bees

by John Holmes

We are now past the winter solstice and the length of daylight is slowly becoming longer. Towards the end of January our bee colonies will begin expanding their brood nest. With increasing resource demands this can be a dangerous time of year. The expanding colony could use all its stored resources and starve. It is critical that beekeepers check on colonies and provide resources if needed. In the Pacific Northwest the weather in late winter-early spring usually prevents foraging but sunny breaks and early spring weather can occur. Native nectar and pollen are very limited during this period but the beekeeper can potentially supply added nutrition by planting early blooming trees. They can provide blossoms both in large numbers and in a concentrated space.

### Witch Hazel (*Hamamelis*)

Unlike the native North America witch hazels, *H. virginiana* and *H. vernalis*, that bloom October to December. The hybrids of Japanese witch hazel (*H. japonica*) and Chinese witch hazel (*H. mollis*), bloom from January to March. Developed for enhanced qualities of flowers, intense fragrance and brilliant fall foliage. they add multi-seasonal interest to the landscape. Most varieties reach 10-20 feet high and wide at maturity, but can be kept smaller with pruning. Planting in the sun leads to a longer and better bloom.



### Cornelian cherry (*Cornus mas*)

A member of the dogwood family, the Cornelian cherry is native to central and southern Europe and parts of western Asia. A small, low-branched, multi-trunked tree, it will grow 10 to 25 feet high depending on the cultivar. Bright yellow flowers open on bare branches from late February to March. It grows well in full sun or light shade and has considerable drought tolerance once established.



### Eastern Redbud (*Cercis canadensis*)

Native to much of the eastern U.S., It matures at 30' tall and up to 30' wide. Many cultivars have been created, there are both upright and weeping forms and varying foliage color. Flowering in March to April, the pinkish-purple flower clusters appear along the bare branches.



### Pussy willow (*Salix*)

Although not native to Washington, *S. discolor*, is native to Canada and most of the eastern states. *Salix caprea* is the native pussy willow of Europe. The weeping pussy willow, *S. caprea pendula*, are popular and liked for their smaller mature size of 8-10 feet. Pussy willows are wetland plants, growing to 25 feet. they are a good choice if you have moist areas in the landscape. Pussy willows are dioecious. the plant is either male or female. Blooming in February-April, the males are the first to start blooming and they produce both pollen and nectar, the female blooms are not as showy and produce only nectar.



A few days before Christmas I received an early gift. Our neighbors had removed their weeping pussy willow tree and it was destined for the dump. Thanks to my wife Mary who noticed its removal and her telephone call, the uprooted tree became ours. Although the tree was not removed with replanting in mind, I'll try and save it. On sunny days in past springs, it was covered in honey bees collecting needed resources.

## COMB REPLACEMENT

### Beeswax and Pesticides

The properties of beeswax are such that it absorbs many chemicals, such as pesticides. Residues of over 170 different pesticide compounds have been detected in wax combs of colonies throughout the U.S. The pesticides include insecticides, fungicides and herbicides used in agricultural and urban environments. These residues come from pollen that bees collect on flowers wherever they forage and are absorbed into the wax combs when bees store the pollen in the colony. Other residues in wax and pollen include some of the pesticides beekeepers use to control mites. Good beekeepers will avoid having pesticides in the colony when honey supers are placed on the colony and will not extract honey from the brood chamber where pesticides were applied. In the brood nest, observant beekeepers may notice some cells that are sealed off with a layer of propolis by the bees. Under the propolis seal is pollen that is contaminated with pesticides, called entombed pollen. Brood combs with entombed pollen should be culled and replaced.

### Beeswax and Disease

Old combs may also harbor disease spores, such as American foulbrood (AFB), chalkbrood, and Nosema. American foulbrood spores remain viable in combs indefinitely.

### Old combs

Old combs accumulate cast off cocoons and larval feces causing the cells in the combs to become shallower and smaller in diameter. Larvae that develop in old combs with smaller cells emerge slightly smaller than they do in new combs with normal size cells. It is not necessarily true that bigger bees produce more honey and smaller bees less honey, so having smaller cells is not as damaging to a bee colony as the preceding two problems. Some people claim that smaller cells prevent varroa mites from reproducing successfully. This claim is NOT substantiated by research.

### Replace Your Old Combs

- Traditionally, beekeepers do not replace combs because it is costly to replace the foundation, and it is energetically costly for the bees to draw out new comb. Some beekeepers have combs that are over 30 years old. It is now time to reconsider this old practice. It is essential for beekeepers to prevent pesticides from contaminating wax and honey. It is critical for the survival of the beekeeping industry to maintain pure, wholesome products.
- In Europe, many beekeepers insist on replacing up to 1/2 of the combs in each of their colonies every year. However, this practice may not be feasible for many beekeepers.
- We recommend that every beekeeper replace all brood combs at least every 3 years.
- To help recognize old combs from new combs, consider using a system to track them. The date of first use can be put on the top bars by scratching, burning, paint, thumbtacks, magic marker, or other method.

An excerpt from **Honey Bee Diseases and Pests 2016** By Dr. Marla Spivak, Mr. Gary S. Reuter Department of Entomology and Minnesota Extension Service

[https://www.beelab.umn.edu/sites/beelab.umn.edu/files/\\_2016\\_disease\\_pdf\\_version\\_s.pdf](https://www.beelab.umn.edu/sites/beelab.umn.edu/files/_2016_disease_pdf_version_s.pdf)

You can view our zoom session with Randy Oliver on our website. It was a great meeting. Click the following link

<https://cowlitzbeekeeping.wixsite.com/website/projects>

Visit his web site for even good stuff.

<http://scientificbeekeeping.com/>

Donations help him continue his research.

**Donate** your extra but still serviceable suits, gloves, jackets, tools, woodenware, books, or anything honey bee related that a new beekeeper might find useful and help them overcome those startup costs. Call or email Zenobia if you can participate.

## The Right Smoker for You

### Standard Features of Bee Smokers

It goes without saying that to get in order to get the most out of your tool, you have to get the best bee smoker. In summary buy a bee smoker that has these features:

1. Heat protection cage to avoid getting burnt on your hands.
2. Made of good quality and durable stainless steel material.
3. Comes with a mounting hook so that you can hang it when it is not in use. It will also ensure it cools down safely after use.
4. Easy to use since at times you might have to use it one-handed. It should also be easy to pump.

The simplistic design of the smoker may invoke the perception that it is a no-brainer to use. However, any smoker, whether homemade or commercially designed, tend to be a bit tricky. The beekeeper has to instinctively know how much smoke to puff in. Too much smoke can be harmful to the bees, and too little ineffective. Striking a balance between what is too much and too little is therefore a great challenge to most beekeepers, especially for beginners. Another challenge associated with the bee smoker is the fact that it may go out when most needed, if you do not use the best bee smoker fuels.

With that said, let's get started with checking out our picks for the best bee smokers.

1. **Mann Lake HD540 Stainless Steel Smoker with Guard**
2. **Goodland Bee Supply Beehive Smoker**
3. **VIVO BEE-V001 Beehive Smoker with Heat Shield**
4. **Aspectek Beehive Smoker with Heat Protection**
5. **Agralogix Bee Smoker with Oxygenator Fuel Tank Insert**
6. **Honey Keeper Beehive Smoker with Heat Shield**
7. **CO-Z Stainless Steel Bee Smoker**
8. **Hoont Commercial Grade Bee Smoker**
9. **HLPB Stainless Steel Bee Smoker**
10. **Honestbee Domed Top Bee Smoker**

From the opinions at <https://beekeepclub.com/best-bee-smokers/>