





Columbiana & Mahoning County Beekeepers' Association

Volume 7 Issue 4

April 2015

President's Corner

Hello Beekeepers!

Last month members talked about what they had learned at the Tri County Beekeepers' Seminar in Wooster. Twenty individuals from our association attended and learned about different aspects of beekeeping to improve their apiaries. Many of them also picked up new equipment from vendors.

Stoney Acres Bee Supply and Coblentz's Bee Supply in Ashland, Ohio are selling woodenware at a very good price. George Stacey is going that way and will pick up orders. If you are interested, bring your order and payment to the April meeting.

Some members will have received their packages before the April meeting, some will be waiting for their bees to arrive. Either way, make sure your boxes are set up and ready to go for the new bees.

April's Beekeeper To-Do List includes rotating boxes on surviving hives to put the queen on the bottom and culling out old dark comb and replacing with fresh foundation. Be sure to checker board the new foundation with drawn out comb in the hive. Now is the time to clean out bottom boards and put the debris into a bucket to avoid drawing raccoons and skunks to the apiary.

When rotating boxes, look for queen cells to make a split. Dan O'Hanlon said "make splits when the oak leaf is the size of a squirrel ear."

Don't forget to register your hives and sign up for Ohio Sensitive Crop Registry. The deadline is June 1, 2015.

Keep feeding the bees. I hope to see you at the next meeting on April 19.

Bruce Deafenbaugh

2015 Tentative Meeting Dates & Locations

May 17 Marsha & Dave Coakley
June 21 Bruce & Andrea Deafenbaugh
July 19 Bruce & Michele Zimmer
August 16 Don Kovach's Parents' Home
Soutember 20 Wiele Deager

September 20 Nick Deemer

October 11 Fellows Riverside Gardens

April Meeting Details

Sunday, April 19, 2015
Potluck Lunch 1:00 p.m.
(Bring your own plates, cups and silverware please.)
Meeting 2:00 p.m.

Mahoning County Experimental Farm 7574 Columbiana-Canfield Rd Canfield, Oh 44406

From Rt 11 North take the Ohio 46 exit toward OH-14. Turn left onto OH-46 North for approximately 6.2 miles. The Farm is on the left across the street from the Canfield Fairgrounds.

From Rt 11 South take exit 34 for US-224 toward Poland/Canfield. Continue on Fairground Blvd. for about 1.7 miles until you reach OH-46 South. Turn left onto OH-46 South. The Farm will be on the right across the street from the Canfield Fairgrounds.



European Foulbrood



European Foulbrood (EFB) is a bacterial brood disease caused by the non spore forming bacterium *Melissococcus pluton*.

Although it is most common in the spring and early summer when brood rearing is at its peak, European Foulbrood can persist through the foraging season. The incidence of European Foul Brood is generally higher when a colony is under stress caused by cool or wet weather, food shortages or hive movement. The effect of EFB is the reduction of the bee population within the hive and consequently a reduction of the honey yield. In severe cases it can lead to the death of the colony.

European Foulbrood is highly contagious and can remain viable for several years in honey, wax and equipment. It is important to understand the symptoms, treatment options and prevention in order to make informed hive management decisions.



The life cycle of this disease begins when young larvae (less than 48 hours old) consumes contaminated brood food. The bacteria

rapidly multiplies in the gut and competes with the larva for nutrition. One of two outcomes occur. First the larva can die from lack of nutrition before capping. Second, when the ratio of nurse bees to developing larvae is high enough, the abnormal demand for larval food may signal the nurse bees to eject the infected larva. In either case, the cell cleanout often causes the brood pattern of a frame to appear patchy or uneven when the infection is serious. As the nurse bees remove dead or dying larvae the bacteria is spread throughout the hive contaminating the food. The few infected larvae that develop

into adult honey bees carry EFB and spread it through their excrement.





While conducting a hive inspection a beekeeper can detect European Foulbrood by the appearance of the brood within the cells. Infected larvae are dull white or grey in color prior to dying. They have lost their plump appearance and look under-nourished. The trachea or breathing

tubes of the infected larvae become visible as distinct white lines. They may have moved within the cell and appear to be coiled or twisted rather than in the characteristic 'C' shape of healthy larvae. Dead larvae will appear to change color from white to yellow, then brown and finally become a liquefied mass if not cleaned out of the cell right away. A thin brown to black colored scale will form as it dries out and can easily be removed.

When European Foulbrood infection is light to moderate, treatment is not required. A beekeeper can help the colony overcome the infection by reducing the additional stress placed on the hive and by re-queening with a young queen. Requeening may help by providing a more prolific queen and a pause between brood cycles that gives the house bees a chance to remove diseased larvae.

If the disease is advanced, the antibiotic Terramycin can be fed as a treatment. According to the Brushy Mountain Bee Farm website, Terramycin label instructions require that the dust be removed six weeks before the honey flow. Other sources indicate that if Terramycin is given just before a honey flow, extracting supers must be removed before treatment and any honey produced during that season should not be used for human consumption. Terramycin is administered in powder form generally but it is also available in a pre-made patty.

Prevention of European Foulbrood is the ideal treatment. By maintaining strong, healthy hives a beekeeper reduces the likelihood of this stress related disease. Supplementing the colony's diet during poor nectar flows or during the cool early days of spring, along with keeping the beekeeping tools clean will provide an effective prevention. A beekeeper should also remove old drawn out comb each year. Doing so will lower the buildup of the disease that is harbored in the wax. Monitoring the laying habits of the queen will also act as prevention. Requeening with a prolific queen will ensure ample number of worker bees to clean and care for brood. Finally, keep robbing at bay. This behavior spreads not only EFB but plenty of other diseases and pests.

European Foulbrood is a bacterial brood disease that can be avoided with proper management that ensures strong, healthy colonies. Understanding the prevention, symptoms and treatments available will assist beekeepers in making informed colony care decisions.

Resources:

Mid-Atlantic Apiculture Research and Extension Consortium (2015). European Foulbrood MAAREC website. Retrieved March 25, 2015 from https://agdev.anr.udel.edu/maarec/honey-bee-biology/honey-bee-parasites-pests-predators-and-diseases/diseases-of-honey-bees/nggallery/image/european-foulbrood/

Ohio Dept of Agriculture. European Foulbrood Disease Fact Sheet. Retrieved March 25 from

 $\frac{\text{http://www.agri.ohio.gov/divs/plant/apiary/Docs/Apiary_Docs_F}{\text{actSheets.pdf}}$

The Pennsylvania State University. (2011). A Field Guide to Honey Bees and Their Maladies. University Park, PA.

Plant Health Australia. (2014). European Foulbrood. Bee Aware website. Retrieved March 30, 2015 from http://beeaware.org.au/archive-pest/european-foulbrood/#adimage-5

Scott-Dupree, C. (Editorial Chair). (2000). Honey Bee Diseases & Pests. Guelph, Ontario: Canadian Association of Professional Apiculturists.

Photos Courteous of The Food and Environment Research Agency © Crown copyright 2015



The Bee Lab Beekeeping Webinars

On March 18 The Ohio State <u>University Bee Lab</u> Webinars returned for 2015 with Denise Ellsworth 's presentation Gardening for Pollinators. This year's topics include Honey Bee Nutrition with Kim Flottum, American Foulbrood with Jim Tew and several other interesting topics and presenters. The Webinars are generally held on the third Wednesday of the month at 9 a.m. and are a free resource. If you aren't available to watch the webinars live, the recordings, handouts and resources are available from 2012-present online. When you go to the **Bee Lab** Homepage select the Courses/Webinars tab at the top of the page and you will see the menu of webinar topics. All the recordings are approximately an hour long and are very informative.



This year's queen marking color is Blue.

It's easy to remember with the mnemonic



You can find a brief explanation in the October 2014 issue of *The Skep*.

Installing A Package of Bees



Many new beekeepers are joining our ranks and there can't be a better way to welcome them than starting at the

very beginning and discussing installing a package of honey bees. Keeping in mind that all beekeepers develop their own thoughts and methods, the following steps offer a guide that can help avoid problems with package installation.

Preparations for new honey bees should begin before the package arrives. First, assemble the hive and all components. This is the time to paint or preserve the wood in your chosen manner. Then, place the completed hive in the selected apiary site and devise a plan to store the package in case the weather is uncooperative. Packaged bees can die if installed on foundation in temperatures below 57° because it is difficult to break cluster and gather food at the feeder. (To be honest, one year we installed packages in the snow. It worked out okay.) Packages can be stored in a cool, dark room (about 65°-70° F) for up to 48 hours as long as the bees are fed by lightly spraying or sprinkling the screen with sugar syrup.



It is best to hive the new package of bees during the cooler late afternoon or early evening hours so the bees

have less opportunity to fly. When installing the package, start by opening the hive and removing the center four or five frames. Next, be sure the entrance reducer is in place and block the small opening with grass. This will keep the bees in the hive until they are settled.

Shake the package or knock it on the hive so the clustered bees fall to the floor of the cage. Immediately sprinkle or spray the sides



of the cage with sugar syrup to wet the wings slightly then remove the cover. As you pull the feeder can out of

the package, spray or sprinkle additional syrup in the opening. It is very important not to overdo the spraying on cool days! Remove the queen cage gently and inspect to make sure she is alive. After setting the queen cage aside (avoiding direct sunlight) shake the bees into the hive. While the bees wings are damp with syrup there should be little flying. Next, place the nearly empty shipping cage at the entrance of the hive. Leaning it against the entrance will provide an opportunity for the lingering bees to walk into the hive once you open the entrance. At this point you can gently replace the frames. Two of the resources suggest spreading the bees out with a hive tool first but if you carefully wiggle the frames into place that may not be necessary.



Now it is time to install the queen bee. There are two options for this step. One is to remove the cork from the candy end of the

cage. Poke a small hole in the candy plug with a nail and hang the cage (candy side up) between two frames making sure the screened side is toward the bees. The other option is to direct release the queen. If this is your chosen method, sprinkle a little bit of sugar syrup on the queen through the screen. Then pull up a frame to expose the comb. Lower the cage to the frame and remove the screen with your hive tool. Let the queen crawl out onto the comb while being very careful not to let the screen spring back and hurt or kill her. Replace the frame and put the inner cover on the hive.

Finally, place an empty hive body on top of the new hive and put the syrup can or feeder of sugar syrup on the hole of the inner cover. Replace the outer cover and remove the grass from the opening. it is suggested

that you check in 24 hours to make sure the feeder is not leaking and the bees are using the syrup. Wait at least five days to remove the empty queen cage and check for eggs and larvae. It is important to continue to provide food to packages as the colony gets established.

Resources:

Mid-Atlantic Apiculture Research and Extension Consortium. Package Bees. MAAREC Website. Retrieved February 20, 2015 from https://agdev.anr.udel.edu/maarec/beginning-beekeeping-2/package-bees/.

Ohio Dept of Agriculture. Installing Package Bees Fact Sheet. Retrieved February 20, 2015 from http://www.agri.ohio.gov/divs/plant/apiary/Docs/Apiary_Docs_FactSheets.pdf.

Reuter, Gary S and Spivak, Marla. Hiving a Package of Honey Bees. University of Minnesota Bee Lab Website. Retrieved February 20, 2015 from

http://beelab.umn.edu/prod/groups/cfans/@pub/@cfans/@bees/documents/asset/cfans_asset_317471.pdf.

Bee-worthy Blooms

A sampling of April blooming trees and plants that honey bees use as nectar (N) and/or pollen (P) sources.



Alder Trees (*Alnus incana*): P Pollen pellets are yellowish green.

Apple Trees (*Malus* spp.): N & P Pollen pellets are yellowish-green.

Cherry Trees (*Prunus cerasus*): N & P A major source of nectar but a minor source of pollen.



Dandelion (*Taraxicum officinale*): N & P Pollen pellets are orange.

Maple Trees (*Acer* spp.): N & P A major source of both pollen and

Resources

Lindtner, Peter. (2014). Garden Plants for Honey Bees. Kalamazoo, MI: Wicwas Press.

Tew, James E. Some Ohio Nectar and Pollen Producing Plants, Fact Sheet HYG-2168-98. Wooster, OH: Ohio State University Extension.

"DandelionFlower" by Greg Hume - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons -

http://commons.wikimedia.org/wiki/File:DandelionFlower.jpg#/media/File:DandelionFlower.jpg // www.jpg

"Tagalder8139". Licensed under CC BY-SA 3.0 via Wikimedia Commons http://commons.wikimedia.org/wiki/File:Tagalder8139.jpg#/media/File:Tagalder8139.j The following poem was written by Walt Crawford, a beekeeper and good friend who encouraged Floyd Marshall. Thank you Floyd for sharing the lovely poems and memories of your early beekeeping years.

Starting With Bees

By Walt Crawford

Some folks begin as spring arrives, To take an interest in bee hives. From many books they can extract The knowledge needed 'fore they act.

Another thing that makes good sense; Find friends with more experience. They'll show you how to handle things When working bees, avoiding stings.

Get catalogs of bee supplies, You'll need the tools and also hives. The come knocked down; put they together When you have time, in winter weather.

Some order bees form way down south, Or buy used hives through word of mouth, Or cut bee trees from someone's farm, Or they may find and hive a swarm.

Get veil and smoker 'fore you start, Hive tool to pry the hives apart, and special gloves prevent the bees From crawling up your open sleeves.

When weather's bad in early spring, And your new hive have bees within, They must have food to build the comb, And raise the brood to make them strong.

A jar with sugar water filled With cap in which small holes were drilled, Inverted o're the frames of bees Gives good support and sure to please.

They bring in pollen from the tress, And from the plants of hills and leas; When weather's good and sun is hot, To raise much brood, they'll need a lot.

It takes two months for hive to grow, And be prepared for honey flow. When dandelion begins to bloom, It may be that they'll need more room.

Extra supers must be ready, When nectar starts to come in steady. Frames supplied with wax foundation, Assists the bees in comb creation.



Salted Honey Peanut Brittle

Ingredients

- 4 tablespoons unsalted butter
- 1/4 cup honey
- 1/4 cup granulated sugar
- 1/4 cup heavy cream
- 2 teaspoons coarse salt
- 1/2 teaspoon baking soda
- 1 1/2 cups dry-roasted peanuts

Instructions

- 1. Line a sheet pan with parchment paper or buttered aluminum foil.
- 2. Combine the butter, sugar, honey, cream and 1 teaspoon of salt in a heavy-bottomed medium saucepan. Heat over medium-low heat for 4 to 5 minutes, until the mixture turns a deep amber color.
- 3. Adjust the heat to maintain a steady boil and stir to keep the mixture from boiling over or scorching until the thermometer reaches 300°.
- 4. Add the baking soda and mix well. It will foam up.
- 5. Stir in the peanuts and immediately scrape the mixture onto the lined sheet pan. Spread it in a single layer with a rubber spatula.
- 6. Sprinkle with the remaining teaspoon of salt.
- 7. Let the peanut brittle cool thoroughly until hardened. Lift from pan and break into pieces.
- 8. Store in an airtight container at room temperature in a cool dry place.

Adapted from the National Honey Board

2015 Officers

President	Bruce Deafenbaugh	330-457-0326
V.President	Chuck Hatch	330-807-0848
Secretary	Heidi Schmidbauer	330-386-7763
Treasurer	Sandra Hays	330-921-5805
Board:	Don Hays (2015)	330-921-1012
	George Stacy (2016)	330-360-8717
	Joe Schmidbauer (2017)	330-386-7763

2015 Ohio Queen Producer

The following Queen and Honey Bee Producer has supplied our association with queen certificates for door prizes. Please show your appreciation when doing business with them.

Williams Honey Bees Frankfort, Ohio 740-998-4380

Check out the Williams' Etsy Shop Also!

Special thanks to our generous suppliers who have provided us with catalogs, donations and door prizes. It means a lot to these folks to hear back from you, so be sure to mention our association when doing business with them:

2015 Supporters

A.I. Root- Bee Culture Gardner's Apiaries Basco Inc. Golden Bee Products B & B Honey Farm H & R Apiaries Beeline Woodenware Heartwood Lumber Betterbee Honey Bee Ware Bee Smart Designs International Mating Nuc Inc Blue Sky Bee Supply Kelley Beekeeping Brushy Mountain Koehnan & Sons Inc. Carbolineuam Wood Preserving Miller Bee Supply

Country Rube's Farm
Cowen Mfg. Inc.
Dadant - American Bee Journal
Dakota Gunness
Draper's Super Bee Apiaries
Ernst Seeds

Plastic Packaging Concepts
Queen Right Colonies
Rossman Apiaries
Valley Bee Supply
Western Bee Supplies
Wicwas Press

Click on the company name to visit their web site.

Article or recipe suggestions and submissions are accepted and appreciated.

Please provide them by the second of each month.

Heidi Schmidbauer 870 Center Road East Liverpool, Ohio 43920 (330)386-7763 jhs494@comcast.net