

Nashville Area Beekeepers

February 2021



News

Missing a Newsletter?

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<http://nashbee.org>

Next Meeting:

Recovering from Winter Losses

with

Kent Williams

February 14th, 2020 at 2 p.m.

Please join us!

ZOOM LINK

In person meetings are cancelled until further notice.



*What do you see?
Answers on page 8
Submitted by John Benham*

MARCH 14th MEETING SPEAKER

Dr. Thomas Dyer Seeley
Cornell University

Author of numerous scientific papers and popular books including *"The Lives of the Bees: The Untold Story of Honey Bees in the Wild (2019)"* and *"Honeybee Democracy (2010)"*.

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Winter Feeding

Make Your Own Winter Food

Developed by Master Beekeeper Kent Williams

[RECIPE](#) in Al Taylor's Blog

Announcing: Extension Ag Talk!

Murder Mites by Dr. Jennifer Tsuruda

(Why Varroa mites are a bigger threat for TN beekeepers than Asian giant hornets)

Tuesday, February 16th, 2021

6 p.m. via Zoom

Register at tiny.utk.edu/beekeeping to get Zoom link

February 14th Meeting Featured Speaker

Kent Williams is a master beekeeper and has been keeping honeybees for more than 30 years. He currently has several hundred hives in his apiaries in Western Kentucky and Mississippi. Kent raises queens, makes NUCs and shakes packages. He also rents bees for pollination in California, Kentucky and Indiana. In addition to speaking to honeybee groups, Kent also sponsors an annual school for beekeepers at his Kentucky farm in April. Even with all his experience, Kent states that he is continuously learning how to keep bees alive and healthy. Please join us to hear about what we can do to move into spring beekeeping with Kent's talk "Recovering from Winter Losses".



Kent Williams

John Benham's February Tips!

February and March are critical – Rapidly increasing numbers of bees in the hive require much more food. It is critical that enough food is available, or the colony will die. In February brood rearing is increasing and occasional days of warming weather allow bees to take cleansing flights and clean out their home. Food supplies continue to diminish, and care must be taken to assure they do not exhaust all stores. If it is warm enough for bees to take cleansing flights, it is likely warm enough to peak in and check on candy or other supplements. ALWAYS take into consideration Wind Chill when peaking in. The bees taking cleansing flights are not affected by wind chill as much as the cluster keeping the brood warm should you decide to remove the outer/inner covers. The colony movement is most likely occupying some or all of the upper box.



John Benham

You will want to add brood building patties toward the end of the month. The queen will be fed more pollen resulting in her laying more eggs. Remember that adding food to increase brood can stimulate large colony increases and sudden prolonged warm periods will further add to their numbers. **Caution: During sudden prolonged severe cold periods in February and March colony mortality can be high if food is exhausted by the increasing population.** When stored food is depleted, the adult bees will cannibalize the larva and eggs. The colony may survive when this occurs, but the build-up will need to start over after the weather breaks. In order to keep the build-up going, supplemental feeding for this type of situation should be planned ahead of time. Keep checking the food supply! By feeding it will be very important to implement swarm prevention in March, April and May. John would appreciate comments on his bee calendar. Please contact him at [John Benham](#)



Submitted by Keri Ann Lawrence

Need Bees?
Here is a list of [TN & KY vendors](#)

Pollinator Plant of the Month (Submitted by Ian Dawe)

Featuring: Red Maple (*Acer rubrum*)

Red maple is a widely adaptable large tree common to the woods of eastern North America. A red tinge can be found in its flowers, twigs, and seeds, but it is most notable for the scarlet of its leaves in fall. Red maple needs plenty of room for its dense, spreading root system. Fall color can be yellow rather than red, so select a cultivar bred for red fall color. Red maple is one of the most popular shade trees in the eastern U.S. It is also a major component of the native habitat throughout its region. From red flowers to its beautiful bark, red maple offers a variety of interests for the landscape in all seasons of the year.



Ian Dawe

A beautiful shade tree that has strong wood but is also fast-growing. Red maple prefers slightly acidic, moist soils. It shows chlorosis in alkaline soils due to manganese deficiency. It tolerates ozone and sulfur dioxide to some extent. This tree should be transplanted bare root or balled-and-burlapped when dormant. Young trees suffering from transplant stress are particularly vulnerable to a flat-headed borer. Leafhoppers can cause leaf distortion. Verticillium wilt and sun scald may also be problems with red maple. Red maple has a shallow root system that competes vigorously with surrounding plants for available water. Cultivars are recommended to ensure good fall color.

For the honeybee, it is a valuable source of nectar and pollen for local hives. As the Red Maple blooms early, it is valuable for the hive, as it stimulates brood production and aids winter survival. A hobby beekeeper with three to six colonies and about ½ acre of garden, one Red Maple is recommended.



Red Maple

Photo & Information courtesy of [Morton Arboretum](#) and [The Friends of the Wildlife Garden](#). Additional information from Shannon R. Trimboli "Plants Honey Bees Use in the Ohio and Tennessee Valleys".

Introducing NABA Members

Seth Cooper

Seth started keeping bees in 2009 after NES, while trimming under the power lines along neighborhood property lines, cut down a tree that was home to a feral bee colony. In trying to save the colony, Seth's wife called NABA, thinking that it would be a simple thing to move the colony to a new home which, of course, was not practical. As gardeners, they were saddened by the loss of pollinators for their Green Hills gardens and Seth's wife innocently suggested they start keeping bees. That began an adventure for them that continues to this day to yield joy.

Seth thought that by simply reading books along with the American Bee Journal and Bee Culture magazine that he would be successful in keeping bees. He made every beginner's mistake possible, including using 10 frame equipment that he couldn't lift once it was filled with honey. He painted the hives a dark color and then placed them in a deeply shaded area with a solid bottom board resulting in a very impressive colony of small hive beetles. Since then, Seth has gone to bee school and has learned from his mistakes and his very smart beekeeper friends. He still makes mistakes, but what he has found is that no matter how much experience one might have, the bees and Mother Nature continue to present us with challenges

Seth is a retired hematologist/oncologist, and remains endlessly fascinated with the biology, culture, and impressive behavior and dynamics of bees and their "superorganism" colonies. There are many pleasures to beekeeping – the pleasures of being with the bees, the honey and beeswax candles that friends and family enjoy – but it is the friendships and companionship of the delightful characters of our beekeeper community that Seth enjoys the most. In 2021, Seth is looking forward to returning to teaching and mentoring new beekeepers in his back yard and at the NABA hives at Centennial Park once Covid-19 vaccinations are available and it is safe to engage again with adults and children interested in beekeeping. Beekeeping is great fun, but teaching and seeing others be successful, brings another level of satisfaction.



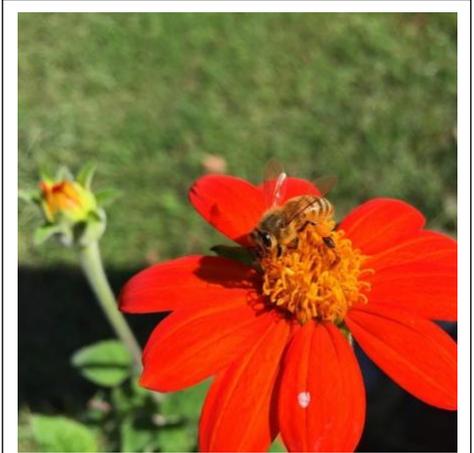
Seth Cooper, M.D.



*Bees on Hellebora
Submitted by Ian Dawe*



Submitted by Mark Jones



*Bees on Mexican Sunflower
Submitted by Andrea Pruijssers*

Apiary Act Of 1995 Requires all Apiaries to be Registered

AVAILABLE ON-LINE

The Tennessee Apiary Act of 1995 (found at TCA Sections 44-15-101 et seq.) requires all new apiaries to be registered with the Tennessee Department of Agriculture. They are then required to be re-registered every three years. The list of beekeepers is maintained by the State Apiarist and upon registration the beekeeper receives a unique registration number. This number is the beekeeper's personal registration number and can be used to brand hives and equipment.

Registering your apiary allows you to receive e-mail notifications of disease outbreaks and updates from the State Apiarist. Also, you will receive notification of aerial spraying of pesticides in your area if the state is notified, free inspection of your colonies if needed, and compensation for colonies destroyed due to American Foulbrood or other regulated pests or diseases. No indemnity is paid for loss of unregistered hives.

A benefit of registration is found at TCA Section 44-15-125, which provides that as long as you maintain the registration of your apiary and otherwise comply with the Apiary Act, and operate your apiary in a reasonable manner, you "shall not be liable for any personal injury or property damage that is caused by the keeping and maintaining of...bees that nest in a beehive that is located on such apiary" (other than for intentional tortious conduct or gross negligence).

Failure to register your bees or comply with the Apiary Act may result in confiscation of your bees, equipment and a \$500 fine. Moving bees and used equipment into, out of, within or through the state are required by law to be inspected.

Click her to [register your apiary, or renew the registration](#) of an apiary previously registered.

You will also need the longitude and latitude of the apiary (see picture). This can be obtained on most phone GPS apps. **Start 2021 with a registered apiary!**



Gene Armstrong Apiary Location

Reviews of Books of Interest to Beekeepers (Submitted by David Hinton)

“Natural Beekeeping: Organic Approaches to Modern Apiculture, 2nd Edition” by Ross Conrad and Gary Paul Nabhan **Ross Conrad will be our NABA speaker for Oct. 10th, 2021!**

When Ross Conrad first published “Natural Beekeeping: Organic Approaches to Modern Apiculture” in 2007, he emerged as an articulate spokesperson for an approach to beekeeping that resonated with a large number of people. He has since revised and expanded the book, in ways that reflect his flexible and non-dogmatic approach to beekeeping.

In his opening chapter “Why Organic Beekeeping,” Conrad makes the case for his approach and also tries to explain just what he means by “natural” or “organic” beekeeping. Somewhat surprisingly he declares that “Despite widespread belief to the contrary, the term does not mean that the final crop or product is free from toxic chemical contaminants.” To the contrary, “. . .the final products of conventional and organic production may not be all that dissimilar in terms of their chemical composition.”

While the difference might not be great in the result, there is a great difference in method. Conrad observes that “At its inception, the organic approach traditionally referred to a management style and philosophy that is biological in nature. . . . Although it was certainly possible that organic management practices would result in a cleaner product, that was not the primary focus. Instead, organic management sought to mimic the natural world in its efforts to be sustainable, with the ability to be carried on indefinitely, as nature has proven herself to be.”

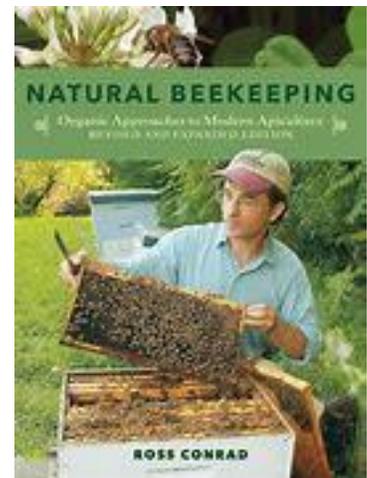
What Conrad advocates is the avoidance of what cannot be found in nature. That means no plastic hive bodies and no plastic foundation, for example. It means passing on commercial bee pollen substitute patties to boost brood in late winter/early spring. “If protein supplementation is required,” he writes, “the natural approach, in keeping with the honey bee’s biology, is to mix powdered pollen with just enough honey so that it forms a dough.”

The book definitely condemns the use of hard chemicals in the hive such as those used in the early days of the varroa infestation. But he is not anti-treatment, and the book recommends many mite treatments that use commercial products based on natural substances. He softened his views because “Then came published research indicating that thymol, a component of thyme oil found in some foods and considered safe for humans, is extremely deadly to varroa, but not to bees or people.” Thymol is the key ingredient for such widely used products as Apiguard and Apivar, which he discusses.

Conrad also deals with acids as a means to control varroa. “In general, the use of acid to control varroa is ideal because it is corrosive but not toxic, and it does not bioaccumulate in honey or wax, this avoiding contamination issues.” He then adds what I found to be a rather surprising and reassuring fact that “Several acids, such as formic, oxalic, and lactic (which is utilized in human metabolism), are all found naturally in honey.” The book then launches into a detailed explanation of how to treat hives with formic or oxalic acids.



David Hinton



“Natural Beekeeping” is actually a very good guidebook for beginning beekeepers but more advanced beekeepers will find it interesting as well. A glance at the chapter titles reveals the book’s scope: working with the hive, hive management, genetics and breeding, parasitic mites, insect pests, four-legged and feathered pests, environmental and human threats, hive diseases, the honey harvest, marketing products from the hive, and finally, organics and the evolution of beekeeping.

I stated in the beginning that Conrad is flexible and non-dogmatic, so even the most scientific-oriented beekeepers will be comfortable reading the book. While he does venture into areas like “spiritual and personal relationship with the bees” not found in traditional science grounded books, he does not embrace the esoteric approaches found in books following the teachings of Rudolf Steiner.

NABA Hive Updates

Centennial Bee Report (*Submitted by Seth Cooper*)

Inspection of the Centennial bees occurred on January 14th. The two most populated hives from November died out in spite of feeding in November and December. They will be replaced in the spring. There are two apparently strong hives remaining at Centennial.

NABA MONTHLY ZOOM METINGS- ON WEBSITE

Did you miss any of our monthly ZOOM meetings? Our programs are posted to the NABA website under [“Member Resources”](#).

- August 2020: “The Threshold to Healthy Spring Bees” by John Benham
September 2020: “Feeding Your Bees – How, When & Why” by Trevor Quarles
October 2020: “Which Bee is Right for Me?” by Al Taylor
November 2020: “Becoming a Better Bee Detective” by Jay William
December 2020: - Not recorded but see links supplied by Jennifer Tsuruda
1. <http://tiny.utk.edu/apiculture>
 2. <utextension.tennessee.edu/>
 3. agresearch.tennessee.edu/filed_day/S
 4. <Facebook.com/LawrenceCountyextension>
- January 2021: “Basic Equipment for Beekeeping” by David Sells

A description of each speaker’s program is available in the [Newsletter](#) for that month.

The recorded program includes the speaker’s presentation plus the question and answer session that followed.

*Bees on Sage
Submitted by Nancie and
Ronnie Woodard*



Bee Science

Honey demand in the U.S. has increased substantially but domestic production has not kept pace and the U.S. imports substantial amounts of honey. Apparently, honey is ranked as the third-favorite food target for adulteration and many of these additives are associated with disease in humans. [Fakhlai and others](#) (2020) have published a review called "The Toxic Impact of Honey Adulteration". The review is free to anyone so just click the link.



Submitted by Mitchell Hilt

What do you see? *(Submitted by John Benham)*



Here is a photo I took of a white eyed drone at a group hive inspection demonstration I did last Summer at an eastern Kentucky association. The eye color is a genetic mutation with chartreuse being the most common color mutation in drones. The white mutation is the most dramatic as these drones are blind and will never leave the hive while the chartreuse drones lead a normal drone's life. The beekeeper who owns this colony was quite concerned about this to the point that he was missing signs of other more serious indications of problems that are evident in the photo. The problems he missed were:

- (1) A lack of any amount of brood or eggs
- (2) A lack of bees in the brood tending workforce, disruption of task partitioning
- (3) The off colored larva present that are indicating some kind of bacterial infection, perhaps EFB or a gut infection such as serratia marcescens an opportunistic pathogen that normally exists in the honey bee midgut that mimics EFB. Treating for EFB with antibiotics such as oxytetracycline when it is a gut microbiota infection can make the gut condition worse.
- (4) The dark comb is likely contributing to the bacterial infection by harboring the pathogen along with chemicals that were brought into the colony by the bees with nectar, pollen and water.
- (5) The lone capped drone cell is in an area that looks like worker brood cells and would indicate a queen playing out with a lack of sperm due to poor mating or disease or a laying worker.

Cooking with Honey

Greek Baked Beans with Honey and Dill

(from cooking.nytimes.com)

Ingredients

- 1 pound dried large lima beans or white beans, soaked if needed at least 6 hours in 2 quarts of water and drained (limas require no soaking)
- ¼ cup extra virgin olive oil
- 1 large onion, preferably a sweet red onion, finely chopped
- 1 28-ounce can chopped tomatoes
- 1 bay leaf
- 3 tablespoons honey
- 2 tablespoons tomato paste
- ¼ cup red wine vinegar or sherry vinegar
- Salt
- freshly ground black pepper to taste
- ½ cup, loosely packed, chopped fresh dill

1. Combine the drained beans and water to cover by 3 inches in a large, oven-proof casserole or Dutch oven, and bring to a boil. Reduce the heat, cover and simmer 30 minutes.
2. Meanwhile, preheat the oven to 375 degrees. Heat 2 tablespoons of the olive oil in a medium size, heavy skillet over medium heat, and add the onion. Cook, stirring often, until tender and lightly caramelized, 10 to 15 minutes. Remove from the heat.
3. After 30 minutes, drain the beans and return them to the pot. Add the remaining olive oil, the tomatoes and the liquid in the can, bay leaf, honey, and 2 cups water or enough to just cover the beans. Stir in the onion and bring the mixture to a simmer. Cover and place in the oven. Bake one hour, stirring often and adding water if necessary. Add the tomato paste, vinegar, salt and pepper. Cover and simmer for 30 more minutes, until the beans are tender and the mixture is thick.
4. Stir in the dill, cover and let sit 15 minutes. Taste and adjust seasonings.

Do you have a recipe to share? -please send email to Deb

ALL DUES WILL RENEW ANNUALLY ON FEBRUARY 1, 2021- see January newsletter for more details!

MITE CONTROL INFORMATION HONEYBEE HEALTH COALITION

[Click here](#) for everything you need to know – booklet, videos, on-line decision tree and more from the ultimate



Submitted by Anita Tilley

Your Newsletter Editor



Hi Everyone –I am Titan, a Malamute, and I used to be a country boy who liked to eat and now I am living in the city with a bunch of crazy border collies and I am on a diet. Please send my mom photos, honey recipes, stories about your bees and any honey bee questions. Here is my mom’s email link Deb My mom gives me a treat when she gets mail from you!