

# North Carolina **Bee Buzz**

The Official Magazine of the NCSBA

**Top Bar Hives  
Paul Madren  
Spring Conference  
And Much, Much More...**

**Spring:  
Let's Grow!**

Spring 2017

# No Matter What You Need...

## WE'VE GOT YOU COVERED!



**HopGuard® II**



# MANN LAKE

WE KNOW BEES

An Employee Owned Company

## 800-880-7694

[www.mannlakeltd.com](http://www.mannlakeltd.com)

\*Free shipping applies to most orders over \$100 shipped standard ground delivery within the lower 48 states.



# North Carolina Bee Buzz Spring 2017



## Features



**Top Bar Hive Beekeeping  
in North Carolina & Virginia**

**7**



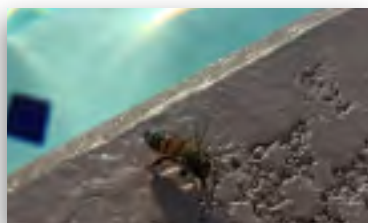
**The Urban Swarm**

**16**



**Paul Madren**

**26**



**The Right to Bee and  
the Etiquette of Beekeeping**

**33**

## North Carolina State Beekeepers Association

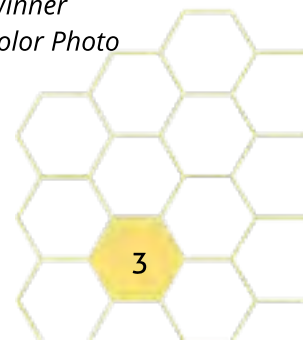
---

Message from the President	5
In the Apiary	11
Master Beekeeper Program	13
Bayer Bee Care	14
In Memory of Bill Sheppard	15
The Urban Swarm	16
NCSBA Beekeeper's Calendar	17
Following the Wild Bees	21
Spring Conference Info	22
Wolfpack's Waggle	25
5CBA's HIP Update	29
Beefeeders	30
Volunteer at the NC Zoo	31



### ON THE COVER:

*"Birds & the Bees"*  
by Suzy Spencer  
Third Place Ribbon Winner  
2016 NC State Fair Color Photo



# North Carolina State Beekeepers Association



The mission of the NCSBA is to advance beekeeping in North Carolina through improved communication with members, improved education about beekeeping, and support of science enhancing the knowledge of beekeeping.

## 2017 Executive Committee

**President:** Rick Coor  
**1st Vice President:** Paul Madren  
**2nd Vice President:** Doug Vinson  
**Secretary:** Lynn Wilson  
**Treasurer:** Bob Gaddis  
**Membership Secretary:** Suzy Spencer  
**Education Coordinator:** Dr. David R. Tarpy  
**State Apiarist:** Don Hopkins  
**Past President:** Julian Wooten



## Regional Directors

### Mountain Region

**Senior:** Allen Blanton  
**Junior:** Eugene Brown  
**Sophomore:** Burton Beasley  
**Freshman:** Freddy Proni

### Piedmont Region

**Senior:** Todd Walker  
**Junior:** Kim Underhill  
**Sophomore:** Gladys Hutson  
**Freshman:** Chris Mendenhall

### Coastal Region

**Senior:** Eric Talley  
**Junior:** Jeff Stone  
**Sophomore:** Cheryl Newbold  
**Freshman:** Kenny Jones

Contact information for the NCSBA Officers and Regional Directors can be found in your Yellow Book Directory and on the NCSBA website [www.ncbeekeepers.org](http://www.ncbeekeepers.org)

## From the *Bee Buzz* Editors:

Jody Moore, *Technical Editor*

[beebuzzeditor@ncbeekeepers.org](mailto:beebuzzeditor@ncbeekeepers.org)

Dr. Lane Kreitlow, *Content Editor*

[beebuzzcontent@ncbeekeepers.org](mailto:beebuzzcontent@ncbeekeepers.org)

We enthusiastically accept article and photo submissions! Please send us your articles and photos of news and information you'd like to share about your local association's latest events, successes and failures, a biography on a long-standing NCSBA member you would like to honor, or a young beekeeper you'd like to see highlighted. All honey bee-related topics will be considered for publication. While we regret that we cannot always include every submission, we will do our best to print as space permits. Please do not resubmit the same item, as we save all submissions for possible use in future issues. Submit your article in .doc or .docx format. Photos should be high quality jpg or tiff format. Please include a caption for photos. Do not embed captions in your photos or photos into your news article, but submit these as separate files. If you do not have access to a computer, we will accept typed or clearly handwritten articles. Mail written submissions to: *Bee Buzz* Submissions PO Box 1771 Pittsboro NC 27312. Email article submissions to: Lane Kreitlow at [beebuzzcontent@ncbeekeepers.org](mailto:beebuzzcontent@ncbeekeepers.org)

Submit your best bee-related photos for possible use! Please do not resize- send us the best resolution photos you have. Include photographer's name, and caption / description for each file. Email your photo submissions to Jody Moore at: [beebuzzeditor@ncbeekeepers.org](mailto:beebuzzeditor@ncbeekeepers.org)

**Bee Buzz Subscriptions:** Direct subscription questions and address changes to Laurie Shaw at [membership@ncbeekeepers.org](mailto:membership@ncbeekeepers.org)



## Message From The President

by Rick Coor

**Consider this-** There is no reason to sell honey as if it were moonshine whiskey! To produce and sell moonshine one does not normally advertise, at least not for long anyway. One might be proud of having the best product, but customers must figure out on their own how to find it; further, taxes can be a problem. With honey, you do not need to keep your location secret! It is fine to advertise. With North Carolina honey, you have a product to be proud of and it is in demand. Honey is a farm product and is not subject to sales tax. The Certified Honey Program will help you advertise and sell your North Carolina honey.

A new label to promote the best honey to be had anywhere, North Carolina honey, is now available. The label prominently features the phrase, "Discover the Goodness of North Carolina Honey" and directs the purchaser to the Certified Honey Producer registry that is found on our website, [ncbeekeepers.org](http://ncbeekeepers.org). There, a customer can verify that the seller is certified by the NCSBA as selling North Carolina honey. The label is intended to be used only by members of the program and the registry verifies such. It will not be found on jars of grocery store honey or the good ole sourwood honey sold year round in the mountains.

Officers of the NCSBA receive numerous calls and emails from people looking for local honey every year. An inquiry may be from a person who has purchased one jar and needs another, or it may be from a restaurant owner who needs a few gallons. Either way, people want to know where North Carolina honey can be found for sale. The Certified Honey Registry is the

way to connect the product with the seller. Currently, the registry lists the only the name and expiration date for each participant but more information can be listed. Consider listing your email address so people can contact you. If you are selling at a public venue, list it in the registry. You can change your listing at anytime. People are looking to buy honey year round. It can be shipped USPS or UPS. So be proud of your product! No need to keep it a secret, no more customers having to figure out where to find it and oh, no taxes.

We are pleased to announce the creation of the NCSBA online store! Although NCSBA t-shirts and vehicle tags have long been popular items for members, until recently the only way to get a shirt with the North Carolina State Beekeepers Association logo on it was to attend one of the two annual state meetings. The tags have been even more elusive to purchase. That situation stands no longer! Enter the NCSBA online store. Access the NCSBA store by visiting [ncbeekeepers.org](http://ncbeekeepers.org) and go to our home page. There you will be able to purchase apparel and vehicle tags year round. In addition to our NCSBA shirts and tags, you will find an expanded offering of items. The Certified Honey Producer Program has a new t-shirt, as well as a Certified Honey Producer vehicle tag. Apparel for the other programs of the NCSBA will be available, too. Visit the NCSBA store for all things NCSBA.

Wear the NCSBA apparel with pride! As a member, you are an important part of the largest association of its kind anywhere.

**NCSBA President**

### Reminder to Members:

Renew your NCSBA membership by March 7 to be included in the *2017 Yellow Book* (the NCSBA membership directory). Membership is still a bargain at \$15 per year.

Some chapters require that their members renew their NCSBA memberships through the chapter, some assist NCSBA by offering this as an option, and some refer their members directly to the NCSBA. If you renew through your local chapter, be sure to pick up your NCSBA membership letter/card from your treasurer at the next meeting. If you

renew directly with NCSBA, you can do so online at [www.ncbeekeepers.org](http://www.ncbeekeepers.org) or by downloading a membership form and submitting it with payment through US postal mail. You will need your membership number to do this online -- it's on your membership card and never changes. When you renew directly, your letter/card will be mailed to you.

Check the information on your 2017 membership letter/card carefully. It will list your email preferences as well as contact information. Please provide corrections or missing information to Laurie Shaw at [membership@ncbeekeepers.org](mailto:membership@ncbeekeepers.org) or call her at 919-585-6052.



# Bailey Bee Supply

Only 8 Miles  
from Durham  
I-85 to  
exit 164

*Walk-in Beekeeping Supply Store!*

**Conveniently Located to I-85 and I-40**  
**Monday - Friday 9am-5:30pm**  
**Saturday 9am-2pm**  
**Closed Sunday**

**Five Frame Nucleus Colonies**  
**Woodenware, Foundation & Hive Kits**  
**Adult & Child Protective Gear**  
**Extraction Equipment & Glassware**  
**AND SO MUCH MORE!**

**[www.BaileyBeeSupply.com](http://www.BaileyBeeSupply.com)**



**147 Boone Square Street**  
**Hillsborough, NC 27278**  
**919-241-4236**



# Top-Bar Hive Beekeeping in North Carolina and Virginia

by Dr. Wyatt A. Mangum University of Mary Washington

## Beekeeping with top-bar hives

is a pleasant and fun way to keep bees. Today, a beekeeper may begin with top-bar hives, or start with frame hives, then later acquire top-bar hives. I followed the second path, starting beekeeping with frame hives at 10 years old. By high school I produced honey by the ton, with 125 frame hives in several apiaries. In my poor undergraduate college days, I had to sell my hives. As a veteran beekeeper in graduate school, I worked as a research technician in the bee research program at NCSU. For much of my life, I had at least 100 hives, and I wanted them back.

With beekeeping, I am always looking toward the unknown. In the spring of 1986, most beekeepers did not know about top-bar hives. I had built one for Homer Powers in the 1970's when he was the state bee inspector of Virginia, although I never saw bees in that hive. Frame hives felt too familiar and too expensive on a student's budget. I was in a unique position, a veteran beekeeper starting over with no hives. So I chose a commercial application of top-bar hives.

My timing seemed unfortunate. Just a year later in 1987, varroa mites arrived in the US and began slaughtering colonies. Beekeepers quit in droves, while I built up a 200 top-bar hive operation, geared mostly for pollination. In this article, I describe some basic features of my complete top-bar hive operation that includes honey production, wax production, package bee and queen production, crop pollination, and even pollen trapping. For these different jobs, my top-bar hives come in different lengths. However, the combs are all one size. There are no restrictions for interchanging combs between hives.

My five-foot hives are mostly for honey production. *Figure 1* shows a pair of these hives on an elevated hive stand. The stand eliminates bending over and damage to my back. I built these stands from scrap wood in the late 1980's to the early 1990's. Their payoff has been huge in making my beekeeping a pleasure. The roofing tin shelters everything below, not just the hives, which is why the stands have lasted so long, along with my hive equipment.



*Figure 1*

*Five-foot-long top-bar hives. For versatility, a set of six entrances is in each end, but only one set is open. Scrap sponges close the unused entrances.*

In all apiaries, the tailgate of the truck must reach every hive stand. At a maximum weight of roughly 50 pounds per foot, a five-foot hive can weigh up to 250 pounds, although usually they do not become that heavy. With apiaries on land owned by others, a beekeeper needs a rapid evacuation plan. My rule: all hives must be mobile, even in the main honey flow. When a landowner tells me my beautiful apiary location will look like *Figure 2* in a couple days, so *Get Out!* My apiary is—Gone. In one night.



*Figure 2*

*Losses and gains. Logging mats cover my apiary site, and build a road out of the mud for the big trucks to haul out the logs. Of course, I moved my bees out.*



*Continued from previous page*

To move hives, I work in rural locations with poor cell phone coverage. I am on my own. Moving my heavy top-bar hives is mostly shifting them between the truck bed and hive stand as shown in *Figure 3*.



**Figure 3**

*Night Move. Between my permanent apiaries, I move hives at night. Moving pollination hives to farms, I move beginning at dawn.*

I think honey in the comb is the premier honey product from top-bar hives. Harvesting the beautiful pristine white combs is wonderful bee work, as shown in *Figure 4*. I study the combs and their construction. Then I give them to research colonies that are low on honey. Ever since becoming a top-bar hive beekeeper, I chose not to compete with beekeepers by selling or giving away my honey. I would rather work on beekeeping problems, and then share that information with beekeepers.



**Figure 4**

*Honeycombs weigh from 5-6 pounds each.*

However, one way to generate revenue with top-bar hives is to cut up the honeycombs, package the pieces in clamshells, and sell them by weight as shown in *Figure 5*. In addition to the lower cost to build top-bar hives, an expensive honey extractor and jars are not needed. The clamshells are not expensive. The beekeeper does need to find a niche market for the honeycomb, but I have seen prices as high as \$20 a pound. Consider the comb part of the business capital, which is up for sale so make sure to get a fair price. Or, switch to liquid honey by crushing the combs and selling the wax separately. Some beekeepers sell cut comb honey on the Internet.



**Figure 5**

*Honeycomb in clamshells. Normal light (left). Backlit (right). A backlit display shows the honeycomb the best.*

The entrances to my hives are at one end of the hive. The bees locate the brood nest near the entrances. To open the hive, I remove the first top bar from this end. Unless the hive is crowded, the first comb is usually not built from one side of the hive to the other, and not down to the floor of the hive. Why? When left to make comb-building decisions on their own, bees do not build comb close to entrances. The six entrances help keep the first comb small, easier to remove without tearing it. Therefore, the entrances help me get in the hive, not just the bees.

The brood nest is easy to inspect, even late in the spring honey flow, because the bees store most of the honey toward the back of the hive, away from the entrances. In the spring busy season, I need to rapidly check the brood nests, not be slowed down by moving heavy honey weighing 12 pounds per gallon. I can

requeen right in the middle of the honey flow when queen acceptance is extremely high. Checking for swarm cells is much easier, too. In general, I have found that understanding honey bee behavior makes top-bar hive beekeeping more pleasant with less labor. Entrance placement is a prime example.

At the end of the nectar flow, beekeepers want to know how much honey can come from top-bar hives. Of course that depends on local conditions and the management skill of the beekeeper. I have begun publishing my honey production data from some three-foot hives, two years so far, on one of my web pages so everyone can see it. My goal is to have a group of five-foot hives managed strictly for honey production with their data published on this web page (*see the end of the article*).

My three-foot long hives are versatile, serving in several capacities. They began for honey production, but I have used them more for starting colonies, and I shake packages from them too. I am planning to put a partition in the middle of ten of them and dedicate those for just starting colonies. Like the five-foot hives, three-footers already have a set of entrances in both ends. One hive body can naturally house two growing colonies. That gives me room for 20 new colonies. The main benefit is that I can handle them as three-foot hives, move and tie them on the truck, hauling them to nectar flows for build up.

I also use the three-foot long hives for queen-cell finisher colonies for my queen-bee production. One-foot hives serve as my mating nucs for mating the queen bees. Sometimes I have one colony per nuc hive body, or I partition the one-foot hive body and install two smaller mating colonies in it.

Originally, my two-foot long hives were for crop pollination. I moved 200 of them from Raleigh to just West of Rocky Mount. My top-bar colonies pollinated mostly cucumbers, spring and fall crops, but also cantaloupes, occasionally yellow squash and watermelons. I worked alone, moving the hives by hand, using a small pickup truck and trailer. No elevated stands were on the farms. All the hives went to the ground, resting on wood keeping them out of the dirt. Going out to the farms, all the hives weighed roughly eight tons. At the end of the summer, after the bees foraged on cotton in nearby fields, the hives were usually heavier, which was fine with me—no fall feeding. But I loaded a lot of 100-pound hives while a few managed to score upward of 110 pounds.

In Virginia, I still rent out my hives for pollination, but nothing near 200 hives, leaving plenty of empty two-foot hives needing a new job. Now some of my two-foot hives serve as bait hives, catching swarms. As

we know, package bees have become very expensive. As I write this article in December 2016, an email quote just announced \$128 for a three-pound package delivery in spring 2017.

Swarm catching with bait hives has become a big part of my bee season. For months, I plan for it (*see Figure 6*). In spring 2016, I caught 17 swarms. The rain ruined most of our spring nectar flow, and the later swarms were small, but the bait hives still caught them. In spring 2015, ironically, I also caught 17 swarms, except virtually all the swarms were large, very valuable new colonies, about 30% occupancy of my bait hives. Think how much 17 packages would cost.



**Figure 6**  
***Preparing two-foot bait hives in late summer. My bait hives go out in early Spring, before the busy season with swarms. To get consistently straight combs, I use foundation strips seen here attached to the top bars. Some go in the bait hives along with brood combs to attract swarms.***

Currently, thermal cameras are the new cutting-edge bee management tools I have been studying. So far, they have been useful in determining some colony conditions in our summer dearth and in winter. My winter season has become busy with me in my apiaries taking thermal images of my hives at night in the cold. Although I am still learning the limits of this technology with my hives, I can tell normal wintering from some situations when the clusters are in distress. Even before early-spring inspections for 2016, I ready knew my winter losses were 11%, no surprises.

*Figure 7* shows a thermal image of Hive 5-2. In this color scale, white represents the warmest region, corresponding to the middle of the cluster. The other colors represent cooler temperatures proceeding from red, yellow, green, and blue the coldest at the ambient

temperature at 35.5°F. The curved black marks on the side of the hive indicate the ends of the brood nest. I marked them in the summer. The brood nest typically decreases in size during the summer dearth, leaving mostly empty comb between it and the entrances. Even during its brood pause (the time in the fall when the bees halt brood rearing), the winter cluster forms at its former brood nest location. For early January, this winter cluster is at a favorable position, still low on the combs, presumably with bands of honey over the bees.

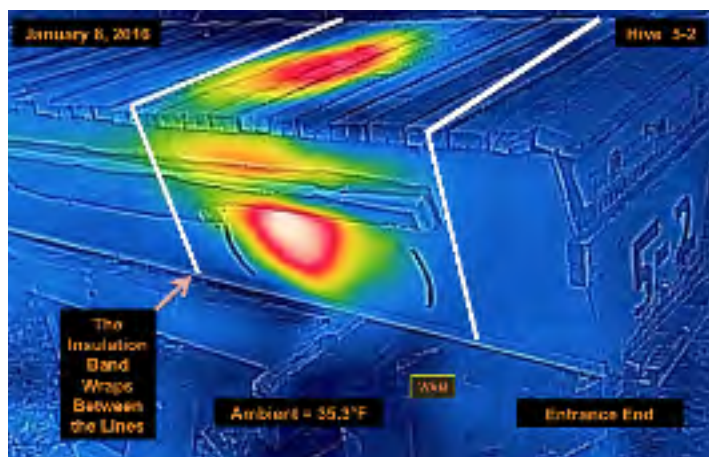


Figure 7

*A thermal image of a five-foot hive. I patrol my apiaries, particularly on winter nights recording thermal images and videos of my hives. I want to accumulate diagnostic case histories of thermal images and the condition of the bees. Night and early morning are best because the thermal camera sees reflections as heat, and other warm objects distort the image.*

When I give top-bar hive presentations, a question occurring fairly often is whether or not to wrap the hives for winter. Of course, the question is more of a concern up North. However in the higher elevations of western North Carolina, where winters are more like northern latitudes, the question is still relevant. While I do not have thermal data on wrapping top-bar hives, *Figure 7* may provide some insight. I drew in white lines suggesting how a band of insulation would wrap the hive, rather than trying to cover the entire hive, a

plan I have heard proposed at bee meetings. One could at least put an insulating pad on the white spot, over the cluster. A thermal camera could direct the placement of the insulation or perhaps a temperature gun.



Figure 8  
*Possum got stung!*

Lastly in my apiaries, game cameras keep a close watch on my hives. They take tens of thousands of pictures, and record many surprising episodes late at night. All kind of critters get caught on my surveillance cameras, from skunks and deer, to rabbits and coyotes, even people. Then along came this critter. I think he just stepped on a bee (see *Figure 8*). Undaunted and constantly curious—here he comes.

For more top-bar hive information, see the links at the top of my main page [TBHSbyWAM.com](http://TBHSbyWAM.com). Some of the links are supplements to my top-bar hive book. See the link “Top Bar Hives and Honey Production” for the honey data. The link “Eight Tons of Top Bar Hives” shows the importance of honey bees with North Carolina’s agriculture.

#### Acknowledgments

The author thanks Suzanne Sumner for her comments on the manuscript.

All Photos: Dr. Wyatt A. Mangum

Visit [TBHSbyWAM.com](http://TBHSbyWAM.com) e-mail: [wmangum@umw.edu](mailto:wmangum@umw.edu)

## Honey Bee Health Coalition

The Honey Bee Health Coalition is a group of over 40 organizations and agencies from food, agriculture, government and conservation that is dedicated to improving the health of honey bees and other pollinators. Through collaboration and communication among groups with vested interests in beekeeping, pollination, and agriculture production, the Coalition seeks to reverse the recent declines in pollinator health by dispensing information that will help with honey bee health challenges. A new series of varroa mite IPM



videos has just been released and may be viewed on their website ([honeybeehealthcoalition.org](http://honeybeehealthcoalition.org)).



## In the Apiary: Spring in North Carolina

by Nancy Ruppert, Apiary Inspector, NCDA & CS


**By the time** most of you read this, spring will be very near. Much of what we can do to help our bees have a productive spring should have already happened, but there are still ways in which we can help the bees thrive this spring:

For those who want to buy bees, time is of the essence to get the best selection! It's been another tough winter, with many losses, and the demand is very likely to be greater than the supply. Try to buy from sources that have a permit to sell (which requires an official inspection); this can be found at the NCDA & CS website ([www.ncagr.gov](http://www.ncagr.gov)) under the "Plant Protection" section of the "Plant Industry" division. Inspection reports for any source of interest are public record, and info about how to access this information is also given on the above website.

If your bees have survived this winter, consider a mite-cleansing dose of oxalic acid (via vaporizing or drizzling) before mid-February, as most hives have little or no brood during January and into early February, especially in northern NC. Varroa mites have caused the losses of *hundreds—maybe thousands—*of hives in NC during the last six months, and these parasites are most susceptible to treatments like oxalic acid during times when brood is not widely present. As always, directions for any hive treatment should be followed closely, and if the proper product is purchased, complete instructions for use in a beehive should be included in the purchase. Regarding other in-hive treatments, as of Jan. 1, 2017, antibiotics such as terramycin will no longer be available without veterinarian intervention; fumagillin is NOT a part of this requirement. More details are forthcoming. In the meantime, please see the Oct 2016 issue of *Bee Culture* magazine for additional information.

Nutrition is always critical to bee health, and when pollen and nectar are scarce—as they usually are in January and early February in much of NC—we can help boost hive populations by supplementing carbohydrates (in the form of sugar syrup, candy boards, or fondant) and protein (in the form of pollen patties/powder). It's been a fairly recent observation that healthy honey bees actually want both pollen powder and patties during much of the winter, and this

kind of supplement goes a long way in quickly building up hive populations that enable the production of LOTS of bees and LOTS of honey. Two caveats here: once sugar supplements are started, it's best not to stop before mid-March, as bees will build brood quickly with the supplements and then gobble down huge amounts of sugar/stored honey during subsequent weeks; also, about eight weeks after starting consistent feeding, be ready to either split those hives or have them swarm, unless you start adding extra supers in late February to give them room for their growing families.



***"Beekeeping is changing, and successful beekeepers change their management practices as good science guides them"***

One of the most productive ways for a beekeeper to use his/her winter time is to attend all possible learning opportunities—beekeeping is changing, and successful beekeepers change their management practices as good science guides them. There are many "bee schools" being held this winter in NC, most local clubs have educational programs at their monthly meetings (along with many other benefits), beekeeping journals like *Bee Culture* and *American Bee Journal* continue to have excellent and up-to-date offerings, useful textbooks are still being printed, and the NCSBA state meetings continue to be an incredible bargain. Hive survival is NOT guaranteed—and in fact is unlikely—without an educated beekeeper.

As always, much of the activities mentioned in this column are most applicable to beekeepers in south-central and southeastern NC, but still pertain to beekeepers in other parts of NC with an adjustment of a week or two on the calendar. Consult your area apiary inspector or other trusted local resources for more details.

# Rossman Apiaries. . .

where you are our business!!



## Cypress Woodenware

We are famous for our "Long-Life" Cypress woodenware. Cypress is a long lasting wood that will weather well and last for years to give your bees the most comfortable home possible.



## Frames, Foundation, Parts

All of our frames are made from #1 white pine and extra strong 3/4" top bar to hold together during extracting. We offer many types of foundation, wax and plastic. Also, replacement parts for repairs.

It's time to be thinking about:

- Requeening
- Mite control
- Splitting hives
- New frames/foundation

ROSSMAN APIARIES is here for all of your beekeeping needs!! Call us today!!



Stop in or call Toll-Free to speak with knowledgeable sales staff.  
1-800-333-7677  
Or shop our online store!



Like us on FaceBook



## Containers

Various containers for bottling are in stock. Glass & plastic, any size you wish. Choose from several styles of closure. Other packing supplies available.



## Medications Pest/Mite Control

Chemicals and drugs to treat many various pests and diseases that will destroy your hive. Protect your colony and treat to prevent loss.



## Master Beekeeper Program

by Paul Newbold Chairman Master Beekeeper Committee

**Spring is almost here.** It's time for the chapters to be holding Bee School. The planning should be complete, and the volunteers in line to help with everything from registration, classroom setup, to helping to teach. When it comes time to test, make sure you contact us at least 2 weeks ahead of time for test and login information for student data. Email us at [mbp@ncbeekeepers.org](mailto:mbp@ncbeekeepers.org) for tests or any questions you may have.

For those of you that plan to test at the spring meeting in March: South Carolina is hosting this year in Rock Hill, SC. Our only testing day will be on **Saturday March 4 at 10:00 am**. Please pre-register before February 25 by email to: [mbp@ncbeekeepers.org](mailto:mbp@ncbeekeepers.org).

All tests will be given out at 10:00 am, NONE AFTER. I will need your name, NCSBA number, and the test you are taking (Certified, Journeyman, or Master). We will also be administering Journeyman and Master practical exams. Indicate if you will be taking those, also.

We have added several new items to the website [www.ncbeekeepers.org](http://www.ncbeekeepers.org) under the heading Master Beekeeper Program, including all levels of the MBP, and a list for suggested agenda topics for your chapters. This list was compiled from topics submitted by the chapters. We have tried to separate them by seasonal subjects. Look them over and if we missed any, please forward suggestions to us.

Lastly, we are working on beginner and advanced course curricula. We plan to have an outline for planning bee schools, along with Power Point presentations and a class outline. We plan to have a written outline to accompany the Power Points to help make your job easier, and keeping the instruction consistent throughout the state.

**GARDEN SUPPLY COMPANY**  
Superb Service Unique Gifts  
Quality Plants

The best place to come for pollinator plants and bee keeping supplies!

1421 Old Apex Road  
Cary, NC 27513  
919.460.7747

It's not a LANDSCAPE... It's a LIFESTYLE!

[f](https://www.facebook.com/gardensupplyco) [i](https://www.instagram.com/gardensupplyco) [p](https://www.pinterest.com/gardensupplyco) [www.gardensupplyco.com](http://www.gardensupplyco.com)

# Healthy Hives 2020 Initiative

by Stephanie Darnell



**In 2016**, Bayer Bee Care Program and Project Apis m. announced their partnership to sponsor research to improve the health of honey bee colonies in the United States by the year 2020. A multi-year, \$1 million research effort, Bayer's Healthy Hives 2020 initiative brought together a diverse group of bee experts to prioritize the most urgent research areas needed to improve the health of U.S. colonies by the end of 2020. Project Apis m., the leading non-profit organization dedicated to pollination research, will oversee the administration of the Bayer-funded research grants which are focused on the following major research objectives:

- Conducting an economic assessment of the "true" cost of commercial beekeeping operations to help beekeepers maximize efficiency and production;
- Creating a set of "Best Management Practices" for commercial beekeeping based on definitive colony health performance data;
- Evaluating the use of "smart hive" technology to monitor honey bee colony health during commercial

migratory operations; and,

- Assessing honey bee genetics for traits relevant to colony resistance to pests and diseases, as well as pollination efficiency and honey production in the United States.

Each year, the research priorities for funding and interim reports will be reviewed by a steering committee consisting of representatives from multiple sectors (i.e. beekeeping, academia, industry, and government) who represent a diversity of backgrounds and experiences. For information on the projects funded in 2016, please visit the following link:

<http://tinyurl.com/h9xk5xk>

Stay tuned for the announcement from Project Apis m. of the 2017 grant winners!



## AMERICAN BEE JOURNAL

[www.americanbeejournal.com](http://www.americanbeejournal.com)

### Association Member Subscription

(Rates listed below are discounted for Association members)  
U.S.

<input type="checkbox"/> 1 Yr.	\$23.80	<input type="checkbox"/> New
<input type="checkbox"/> 2 Yr.	\$45.05	<input type="checkbox"/> Renewal
<input type="checkbox"/> 3 Yr.	\$63.75	

Prices good through  
Dec. 31, 2017

Return to: American Bee Journal  
51 S. 2nd St., Hamilton, IL 62341

or Call  
1-888-922-1293

Subscriber's Name \_\_\_\_\_  
Address \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone \_\_\_\_\_  
Email \_\_\_\_\_

*The Beekeeper's  
Companion Since 1861*

*Don't let your  
beekeeping fall  
behind the times!*



**Discounted  
Association Rates**



*Published Monthly*

*Free sample copy upon request*



**Bill Sheppard**

## In Memory of Bill Sheppard: How I Became a Beekeeper by Hugh Madison

**I have been keeping bees** now since 1993, and I'm very proud of how far I have come as a beekeeper. To me, honey bees are some of God's most wonderful creatures! I have not always been a beekeeper. My first career was a stint of 31 years in the United States Air Force.

So how did I choose this beekeeping career? Let's go back to my years as a high school student. In those days, if you were in high school and you had a driver's license you could apply for a permit to drive a school bus. If I remember correctly, we were also paid. I believe it was twenty-one dollars a month!

I applied for the bus driver position, went through the training, and was certified as a school bus driver. I was assigned to bus #73. My route was through Colonial Heights (a housing area just outside the city limits of Aberdeen) and I had a couple of stops on Linden road between Aberdeen and Pinehurst.

Colonial Heights was started back around 1948 when Robbins Mill came to Aberdeen. I guess a good name for the kids who lived there would be the "mill hill brats."

One of those "mill hill brats" was a kid by the name of Billy Sheppard. Billy was 4 or 5 years younger than me, and he was one of the students that rode my bus to school every day. One day on the way to school, Billy got a bit unruly so I stopped the bus and put him off. You could do things like that in those days. (Keep in mind Billy said this really happened, but I don't remember doing such a terrible thing.) Anyhow, Billy had to finish his trip to school via his two feet. He said that he promised himself that some day he would get even with "ole Hugh" for throwing him off the bus.

Well, he did get even. In 1992, my wife and I came back to Aberdeen after completion of my Air Force

career. My wife's parents owned a large farm about 5 miles west of Aberdeen and they gave us some land to build our home on. I am not a farmer (remember, I was a "mill hill brat") so I needed something to occupy my time. Someone mentioned beekeeping. I asked several people, "How do I get into beekeeping?" I was told, "Contact Bill Sheppard." Remember Billy? He is the one I supposedly threw off the school bus. I looked up his phone number and I called him. I asked, "Billy, do you remember me?" And I know he is thinking to himself "I sure do remember you, you sorry so and so!"

I told Billy I might be interested in learning to keep bees. His reply was, "Great, come see me and I'll help you to get started." I'm sure he was thinking, "Now I get even!" I believe his objective was to lure me in by saying, "Start with one hive", and then "split the hive and make two." And after I had two he would keep needling me "to split and make 4." Then split and make 8, and so on, and so on. All the while his primary objective was to have me keep spending money on bees and equipment until I was bankrupt, thereby getting even with me for tossing him off the school bus!

Well, he didn't bankrupt me but he did cause me to become so interested in honey bees that I was able to get up to 80 colonies in three bee yards. But that wasn't good enough for Billy. "You need to learn how to raise queens and start making nucs to sell," said Billy. And I did just that! With Billy's encouragement and mentoring, I enrolled in the NCSBA Master Beekeeper Program and on May 30, 2006 I became a Master Beekeeper, something I am very proud of. I also own a small bee supply business.

Billy and I became very close friends and we went to a lot of places together to talk to folks about bees. We conducted a lot of "field days" together and had some truly amazing times. I'm going to miss Billy.



### **Telling The Bees** William "Bill" H. Sheppard, Jr.

It is with a heavy heart that we bid farewell to our longtime friend, beekeeper and supporter of the NCSBA, William "Bill" H. Sheppard, Jr., who passed away on Dec. 2nd. Bill contributed more to beekeeping in North Carolina than seems fathomable by a single person, and yet he never seemed to tire of it or run out of great stories. We are truly fortunate to have known him. Bill's legacy will live on though his family and the many lives he touched, the countless beekeepers he inspired, and the untold number of bees that will be saved as the result of the unfaltering advocacy to which Bill devoted his life. Beekeeping, and indeed the NCSBA, will never be the same without him.

*Read more about Bill in the Fall 2016 issue of the Bee Buzz.*

# The Urban Swarm

by Rick Coor



**An urban beekeeper** arrived home one afternoon and noticed that someone was over in his neighbor's backyard gathering a swarm of bees that apparently had been cast from one of his hives. The beekeeper felt that someone was taking something that belonged to him. In another situation, a homeowner became upset when honey bees moved into the wall of his house. He believed that the bees were from his neighbor's hives and therefore belonged to the beekeeper. These situations beg the question of who owns a swarm of bees. If a swarm from your hive leaves your property, do the bees belong to you? And if they are still considered to be your property, are you responsible for any cost or damages they may cause? Should one make a reasonable effort to contain a colony of bees?

Beekeeping is considered to be agriculture. So then, should honey bees be regarded as wild game, or as farm animals? The ownership of wild game is regulated differently than that of farm animals. Wild game is allowed to roam. If wild game from my neighbor's property (or from anywhere for that matter) were to roam or take residence upon mine, as the property owner I have certain property rights to the animals; others no longer have a claim to them. I can disallow someone from coming onto my property to hunt, feed or recover any wild game; they are effectively part of my property but I do not actually *own* the animals. The owner of the land from which they came has no responsibility for any damage they cause either, and landowners are not obligated to fence in wild game.

The situation with farm animals is different. People are allowed to own livestock. Laws require that farm animals must be kept in a fence or pen. If my neighbor's cow, pig or horse were to cross over their fence and stray into my pasture, I can impound the animal, but my neighbor can lawfully recover it. The animal would be considered my neighbor's property, and my neighbor would be liable for any costs or damages their animal causes. Owners of livestock are required to make a reasonable effort to fence or otherwise control their livestock.

Honey bees are like wild game in that they roam around, but they are also like livestock in that people can lawfully own them. In a rural bee yard, a colony might cast a swarm that settles nearby or otherwise disappears, but the urban swarm does not necessarily fly outside the city limits to find a suitable tree or old building to reside in; it does not need to. There are plenty of nice trees and buildings to occupy in town.

Traditionally, the conversation in beekeeping about swarm management is about avoiding lost honey production, or how a weakened post-swarm colony might fail. There are various ways to manage the swarming tendency of honey bees, and the subject is well written about. Something that is not well clarified in bee literature is who owns a swarm, and whether or not beekeepers are responsible for removing swarms that move into nearby buildings.

Some beekeepers take measures to reduce swarming, while others allow the colony to grow without preventing swarming. A healthy colony of honey bees is subject to cast a swarm at some point, often without warning and sometimes at seemingly odd times of the year. The urban beekeeper can reduce the impact of swarms to his or her neighbors in the following ways:

1. Learn and practice management techniques that can reduce swarming.
2. Have extra boxes and frames handy. Be ready to gather a swarm at any time.
3. Use swarm traps or bait hives. Place one or more in the vicinity of your hives. A neighbor may also be willing to put one out. Swarms often will go into traps as close as 100 feet from where they originated.
4. Talk with neighbors about what swarming is. Swarming is a natural behavior of bees, and swarms are typically not dangerous. But caution someone about approaching a swarm, especially if the bees are in the air flying. They do not usually sting but they will under certain conditions.

The answer to the question of who owns a swarm and who is responsible for damages does not immediately present itself in regulatory information. In rural areas, a swarm can appear from an unknown source. No one may know of a beehive nearby, so the property owner where the swarm lands takes responsibility for the bees. But in urban settings, the nearest beehive may be considered the source, whether or not the hive actually exhibits any sign of casting a swarm. As beekeepers, we should recognize the impact that swarms may have on the perception of beekeeping in urban settings, and understand that we own the swarms, for better or worse. Be ready, the urban swarm is coming!

### Beekeeper Tasks

- Treat for mites if necessary
- Monitor food stores
- Inspect brood nest
- Put out swarm traps

### Plants in Bloom

- Blackberry
- Dandelion
- Sugar Maple

### What Are The Bees Doing?

- The bees are starting to rear more brood to replace old bees that over wintered
- Honey stores are being depleted by brood rearing, drones start to appear

Photo: Phillip Barfield

# March 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	1	2	3 NC / SC Joint Spring Conference Rock Hill, SC	4
5 Coastal Blackberry(46)	6	7	8	9	10	11
12  Daylight Savings	13	14	15	16	17  St. Patricks Day	18
19	20	21 SPRING BEGINS	22	23	24	25
26	27	28	29	30	31	1

### Beekeeper Tasks

- Evaluate brood rearing
- Requeen if necessary
- Feed if weather is bad for several consecutive days
- Remove old empty combs and replace with new foundation

### Plants in Bloom

- Sumac
- Blackberry
- Tulip poplar
- Holly

### What Are The Bees Doing?

- Bees should be rearing large amounts of brood and drawing comb
- Plenty of drones are in the hive

Photo: Lane Kreitlow

# April 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1 April Fool's  Coastal Sumac (151)
2	3	4	5	6	7	8  Mountain Sumac (146)
9	10  Piedmont Blackberry (20)	11	12	13	14	15
16 Easter  Coastal Tulip Poplar (30)	17	18	19	20	21	22 Earth Day
23  Coastal Holly (45)	24 Piedmont Tulip Poplar (25)	25	26	27	28  Piedmont Holly (15)	29
30	1	2	3	4	5	6

### Beekeeper Tasks

- Add honey supers
- Check hive for queen activity
- Add empty combs or frames of foundation to reduce swarming
- Prepare to gather a swarm if swarm cells are present

### What Are The Bees Doing?

- The queen is laying eggs day and night
- Bees are busy gathering pollen and making honey
- Colony may prepare to cast a swarm

### Plants in Bloom

- Raspberry
- Privet
- Gallberry
- Poison Ivy

Photo: Jody Moore

# May 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1	2	3	4	5	6
7	8 <i>Mountain Holly (15)</i>	9 <i>Coastal Gallberry (28)</i>	10 <i>Mountain Blk Locust (14)</i>	11	12	13
14 <i>Mother's Day</i> <i>Mountain Raspberry (17)</i>	15	16	17	18	19	20
21 <i>Mountain Tulip Poplar (25)</i>	22	23	24	25	26 <i>Mountain White Clover (51)</i>	27
28	29 <i>Memorial Day</i> <i>Coastal Sourwood (20)</i>	30	31	1	2	3



*Quality that can't be beat  
anywhere in the industry.*



**M00926**



**M00928**



**M00927**



**M009281**

**Premium  
Smokers**

**Dadant Cricket Style  
Hat & Veil, Suit  
and Jacket**



**V01230(size)  
Suit**

*Our big beautiful 2017  
Bee Supply catalogs will  
be mailing soon.  
Make sure you receive your copy!*

**Little Wonder  
Hand-Extractor Kits**

**M00396KIT - Hand  
M00403KIT - Power**



**Assembled  
Starter Kit**

**C52201P**



*[www.dadant.com](http://www.dadant.com)*

CHECK WITH YOUR NEAREST DADANT BRANCH FOR PRICING AND THE BEST SHIPPING RATES

**820 TIGHTSQUEEZE INDUSTRIAL RD., CHATHAM, VA 24531  
TOLL-FREE 800-220-8325 FAX 434-432-8463**

## Following the Wild Bees (A Book Review)

by Lynn S. Wilson

**Imagine setting off** into a sunny meadow on the verge of brightening with yellow goldenrod blooms. Are honeybees investigating those spires? Even better, picture finding honeybees collecting water along a stream or wet spot. Want to follow them home?

Thomas D. Seeley is a Cornell biology professor and author of *Following the Wild Bees: The Craft and Science of Bee Hunting*. Dr. Seeley brings years of studying honeybees to his bee hunting. His book provides detailed instructions for a bee box to capture a few bees to lead the bee hunter to the hive. Using anise scent on a square of comb that's filled with sugar syrup to entice the bees, the bee hunter releases his now-paint-dotted captives and makes a record of their "away" time and the direction of hive-bound travel.

The pleasures, Seeley says, come from letting the bees bring all of one's attention to the out-of-doors and to the miracle of this six-legged critter's navigation and communication skills and *not*, from "taking up" the honey tree. While, historically, finding the honey was the reason for beelining, it is particularly unfair to

unmanaged bees. When the nest is destroyed and winter food supplies stolen, the colony is doomed.

Stocking a bee yard from wild swarms is another matter. Seeley writes that capturing swarms is his main way of increasing the colonies in his managed bee yard.

One of his eight "Biology Boxes" details how to set out the bait boxes. His research included comparing nests to find out more about honeybee preferences. (His book *Honeybee Democracy* details how swarms select a new home.)

One of the most intriguing parts of Seeley's book is the detailed information about how to convert "away" time into an estimate of how far away the nest is. One of the most controversial sections offers his opinion about the sustainability of current practices for controlling Varroa mites.

Recent research in the Arnot Forest, Cornell's research forest near Ithaca, NY, showed that colonies living in the Forest between 1977 and 2011 suffered a massive die-off at some point. Seeley speculates that the die-off corresponded to the arrival of the *Varroa destructor* mite. Honeybees living in the Forest now are all descended from just a few survivors.

We need those bee genes and Seeley leaves the reader with the words of Henry David Thoreau: "In Wildness is the preservation of the world."

*Reprinted Courtesy Roxboro Courier-Times*



**Affordable Beehive Weighing Scale  
Only \$199**

Visit [www.coldcovetechnologies.com](http://www.coldcovetechnologies.com) to order online  
Or call Chuck at 919 744 8003

**For Langstroth 10-Frame and 8-Frame Hives  
Easy to Install and Use  
Records and Displays Weight History**

**Discount for Bee Club Quantity Purchases  
Bee Clubs contact: [sales@coldcovetechnologies.com](mailto:sales@coldcovetechnologies.com)**

**March 3 - 4**  
**Rock Hill, SC**



**North Carolina**  
**South Carolina**

# 2017 SPRING CONFERENCE



[scstatebeekeepers.com](http://scstatebeekeepers.com)



[ncbeekeepers.org](http://ncbeekeepers.org)



## Dr. Jennifer Tsuruda

Originally from California, Jennifer has been studying honey bees for over 15 years. She received her PhD at the University of California at Davis, was a postdoctoral researcher at Purdue University and has studied honey bee foraging behavior, reproductive physiology, behavioral responses to stress, and genetic imprinting. Since joining Clemson University as SC's Apiculture Specialist in 2014, she has been working on research projects related to honey bee genetics and pesticide exposure in ornamental landscapes. Jennifer has also been organizing and speaking at scientific and stakeholder meetings, guest lecturing, participating in field days, and holding training programs and outreach events.



## Dr. Larry Connor

Lawrence Connor was born in Kalamazoo, Michigan and earned his doctorate in honey bee pollination of crops at Michigan State University. He has worked as Extension Bee Specialist at The Ohio State University, President of Genetic Systems, Inc. (which produced bees of thousands of instrumentally inbred strains of honey bees as well as the *Starline* and *Melissa* breeding stock), and now owns and operates *Winkas Press*, specializing in publication of quality bee books. He relocated (from Connecticut) back to Michigan in April 2007 to continue growth of his publishing and writing activities. He has edited and published over two dozen books, and recently written *Increase Essentials* (2006), *Bee Sex Essentials* (2006), *Queen Rearing Essentials*, *Bee Rearing: A Field Guide*, *Swarm Essentials* (with Steve Repasky), *Honey Bee Biology and Beekeeping* (with Deway Carron), *Increase Essentials Second Edition*, *Queen Rearing Essentials Second Edition* and *Mating Biology of honey bees* (with C. and N. Koeniger and J. Ellis). Connor is a regular contributor to *The American Bee Journal* and to *Bee Culture Magazine*. He travels extensively and lectures on a wide range of subjects concerning honey bees, bee breeding, pollination and colony management.



## Dr. Deway M. Carron

Emeritus Professor of Entomology & Wildlife Ecology, Univ. of Delaware; Affiliate Professor, Dept. Horticulture, Oregon State University. He has 50 years beekeeping, 40+ years teaching beekeeping, doing bee extension and bee research at Cornell (1985-90), University of MD (1970-1981) and University of DE (1981-2005). He is joining our spring meeting after spending 5 months in Bolivia where he keeps 84 colonies of Africanized bees and teaches beekeeping at University de San Simon and among communities in the Andes Mountains. Following retirement, he moved from the east coast to Portland, OR to be closer to (and spoil) grandkids while continuing to write, talk about bees, and teach beekeeping. He has 6 backyard colonies in Tigard, OR.



## Dr. Leo Sharashkin

Editor of *Raising Bees With a Smile*, a comprehensive resource on keeping bees naturally in horizontal hives. He is a regular contributor to *American Bee Journal*, *Bee Culture*, *The Beekapers Quarterly* (UK), and other major publications, and speaks internationally on sustainable beekeeping and organic growing. He holds a PhD in Forestry from the University of Missouri and a Master's in Natural Resources from Indiana University. Author of works reviewed research in sustainable agriculture, he lives with his wife and four children on a forest homestead in the Ozarks in southern Missouri where they catch feral sylvan-black swarms and raise bees in several dozen low-maintenance, easy-to-build horizontal hives.

## Special Event Speakers



Frank Libara

Frank has served as the Operations Manager at Moon Lake LTD, Wilkes Barre, PA location since its opening in February 2013. He is a graduate of Lock Haven University. Frank is a certified EAS Master Beekeeper. In addition, he owns and operates 100 hives and produces his own labeled brand of honey, jellies and soups. Frank teaches beekeeping classes at the Wilkes Barre location.



David Ardal

David started beekeeping in 1983 and runs Hilton Head Honey and Bees Across America. He is the president of the Bees and Honey Association and works to emphasize the natural and healthy benefits of honey and bees.



Steve Genta

Steve is a 3rd generation beekeeper, keeping bees for over 25 years, and a SC Master beekeeper. He has been making mead for over 10 years and has won several blue ribbons for his mead, including Best in Show at the 2013 EAS Conference. As a Senior Welsh Honey Judge, he has experience with all types of mead making and judging.



Paul Newbold

A North Carolina native, Paul took up beekeeping 18 years ago after starting retirement. He and his wife, Cheryl, completed their Master Beekeeper requirements in 2014. Since 2015 he has been Chairman of the NCSCBA Master Beekeeper Committee. They now keep about 10 colonies of bees in North East NC.

## HOTEL INFORMATION

Country Inn & Suites by Carlson  
895 Patriot Pkwy  
Rock Hill, SC 29730  
(803) 329-5151

Holiday Inn Rock Hill  
503 Galleria Blvd  
Rock Hill, SC 29730  
(803) 323-1900

Red Roof Inn  
1037 Riverview Rd  
Rock Hill, SC 29732  
(803) 329-3450

Baymont Inn & Suites  
1106 N Anderson Rd  
Rock Hill, SC 29730  
(803) 329-1330

**HOOD CENTER**  
EDUCATION | CONFERENCES | EVENTS

**York Technical College**  
**Rock Hill, SC**

Check [www.ncbeekeepers.org](http://www.ncbeekeepers.org) for the latest updates

**NC Bee Buzz - Spring 2017**

# SCHEDULE OF EVENTS

## FRIDAY, MARCH 3rd

### 11:00 REGISTRATION

1:00-1:15 WELCOME! - Steve McNeely - Grand Ballroom

1:15-1:25 EAS UPDATE - Buddy May - Grand Ballroom

1:30-2:10 BREAK OUT SESSION A - Refer to next page for details

2:20-3:00 BREAK OUT SESSION B - Repeat of Session A

### KEYNOTE PRESENTATIONS

3:10-3:50 *Protecting bees from pesticide poisoning & research projects* - Dr. Jennifer Tsuruda - Grand ballroom

3:50-4:30 *Natural beekeeping approaches that work* - Dr. Leo Sharashkin - Grand Ballroom

4:30-5:00 FREE TIME

5:00-6:00 BANQUET & FULL MEAL - Grand Ballroom

6:00-7:00 *Is it American Foulbrood?* -

Dr. Larry Connor - Grand Ballroom

7:00-8:00 *Reducing mite impact in your apiary* -

Dr. Dewey Caron - Grand Ballroom

## SATURDAY, MARCH 4th

8:00-9:00 Visit our vendors!

8:00-8:50 *SC Presidents Meeting & Executive Committee Discuss EAS* with Dr. Dewey Caron & Buddy May - Palmetto III

8:00-8:50 *NC Presidents Meeting* - Crescent III

9:00-9:15 WELCOME! - Steve McNeely - Grand Ballroom

9:15-10:00 *Honey bee nutrition* -

Dr. Jennifer Tsuruda - Grand Ballroom

10:00-10:30 *NC State Inspections* -

Don Hopkins - Grand Ballroom

### SPECIAL EVENTS

10:00-12:00 *NC Journeymen & Masters test* -

Paul Newbold - Telecommunication Theater

10:40-12:00 *Mead making 101* -

Steve Gentia - Crescent I

10:40-12:00 *How to make soap, creamed honey, honey lotion, lip balm* - Frank Licata - Crescent II

10:40-12:00 *A free public seminar on bees and beekeeping* -

Robbie Davis & YCBA - Palmetto II & III

10:40-12:00 *Journeymen review* -

David Arnal - Carolina Room

12:00-1:00 BOX LUNCH

1:00-2:00 *Why and How every beekeeper must keep nucleus hives* - Dr. Larry Connor - Grand Ballroom

2:00-3:00 *Advantages and management of horizontal hives* -

Dr. Leo Sharashkin - Grand Ballroom -

3:00-4:00 *Colony forensics* -

Dr. Dewey Caron - Grand Ballroom

## Breakout Session Speakers



Tami Enright

Tami Enright is a journeyman beekeeper who has turned a passion as a teacher and a love for bees into a full-time career with The Bee Cause. She started beekeeping by putting two hives in her front yard garden on Isle of Palms, SC - to help teach her four children about the importance of honey bees. Tami has expanded this into all aspects of her life. She is the Executive Director of The Bee Cause Project.



Jeff Blackwell

Former President of the Oconee Beekeepers Assoc. and a SCBA Journeyman Beekeeper. Coordinated installation and management of 8 "The Bee Cause" observation hives for Oconee County Schools in 2016. While serving 5 years on the SC Foothills Heritage Fair board, was instrumental in creating a scholarship program, in conjunction with the Oconee Beekeepers Association, to provide training, bees and supplies.



David Segrest

David Segrest is a 5 year beekeeper in Charlotte, NC. He is a Master Beekeeper in the NCSBA Master Beekeepers program. He has taught international real estate in China, Korea, Bulgaria, Romania, Russia, Argentina, Brazil, Uruguay, The Dominican Republic, Costa Rica, Nicaragua and El Salvador. He began making bait hives 2 years ago, and has considerable success catching swarms.



Jim Strahm

Jim is originally from the Midwest and is currently retired. He previously served in the US Navy and retired after 20 years in the Submarine Service. After that he worked at the SC State Ports Authority and retired after 17 years as a Heavy Lift Maintenance Supervisor. He is currently a volunteer with the American Red Cross Palmetto Chapter. He is a Journeyman Beekeeper and member of the Charleston Area Beekeepers Association, and the President of the Charleston Community Bee Gardens.



Larry Haigh

Larry is the president of the SCBA and training coordinator for the Charleston Beekeepers Association. He works hard promoting bees and bringing the SC beekeeping community together.



Buddy May

Buddy is a South Carolina Master Beekeeper, an EAS Certified Master Craftsman, and currently on the EAS Board representing South Carolina. He is currently engaged in a Research Project for the SC Maylor Craftsman award. Recently established a "Free Clinic" where beekeepers can bring samples and receive an evaluation of their colonies for Nosema, Tracheal mite, Varroa, Small hive beetle, viruses, and various beekeeping challenges.



Wes Bommer

Wes is a master beekeeper and has kept bees for many years. He has held the office of SCBA president for 4 years. He was named 2015 Beekeeper of the Year. Wes is currently working with inmates in the SC penitentiary system. Wes has mentored many inmates and has done great innovative work to teach beginner and journeyman level beekeeping.



Tim Hall

As a child, Tim was scared of bees, but interested in them. He grew up on a farm and worked as a tobacco farmer. He worked in taxidermy after graduation. He purchased his first bee hives for \$45 each and after 20 years has expanded to 5000 hives. He considers working with bees to be a blessing and rewarding.

# Serving **North Carolina** **Beekeepers** with the **best** since **1977**

VISIT *OUR* **RETAIL STORE** AND GET  
**10% OFF YOUR ORDER**

*\*Some exclusions apply*

610 Bethany Church Rd, Moravian Falls, NC 28654



**Wooden Ware**  
*proudly built locally*  
**in Wilkesboro, NC**

**1-800-BEESWAX**

**[www.BrushyMountainBeeFarm.com](http://www.BrushyMountainBeeFarm.com)**

**FREE SHIPPING ON MOST ORDERS OVER \$150\***  
SOME RESTRICTIONS APPLY



**Brushy Mountain Bee Farm**  
*Best Quality | Best Service | Best Support*

**It has been awhile** since I've written a column for the NCSBA *Bee Buzz*, a reflection of our changing job duties and the shifting priorities at NC State and Cooperative Extension. Our change in emphasis has resulted in a flourish of discovery and research, unfortunately at the expense of our extension focus, but in doing so we have been able to support an excellent cadre of graduate students, postdoctoral researchers, and technicians in our program.



Photo Courtesy Dr Tarpy

**James Withrow**

Within the past month, two of our graduate students have successfully defended their degrees. The first, James Withrow, completed his Master's degree while studying aspects of queens from two very different perspectives. His first thesis chapter investigated an invisible and very curious phenomenon that we're only just beginning to understand. We all know that honey bee queens mate with multiple males, and therefore there are many subfamilies within colonies. As James has conclusively shown, the distribution of these subfamilies among the workers is dramatically different from those among the queens. Indeed, many queens that are raised during emergency queen rearing derive from subfamilies that are rarely if ever seen among the workers. These "royal patriline" suggest that there may be something special genetically with these queens, so there may be some hidden decisions going on over queen rearing that we didn't know about before. James' second thesis chapter was much more familiar to beekeepers, where he measured the temperature profiles of queens during shipment of packages. At issue here is that overheating of queens and packages can result in mortality, but queens that get too chilled can also lose

sperm viability and thus become poor egg layers. James tested how variable the temperatures can be during package transport and how that temperature exposure affected queen longevity, which teaches us all that we need to be much more careful about temperature when we install packages.

Carl Giuffre is a Ph.D. student in our Biomath program whose research is highly integrative by every definition. Carl's research has three main projects, threaded together by the technical process

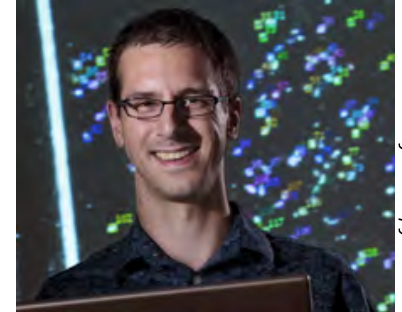


Photo Courtesy Dr Tarpy

**Carl Giuffre**

of using imaging technology to automate information acquisition. His first chapter addresses the behavioral and social grooming behavior of honey bee workers, an important mechanism for disease resistance. He has developed an entire video-capture system and bioassay to automatically calculate the rate and degree of grooming, which will help future research into collecting such data in a high-throughput process. His second chapter investigates the interaction between the varroa mite and the viruses that they vector to cause bees to get sick. Using video tracking technology that he developed, he has robustly quantified the behavior of individual mites and correlated those behaviors with the incidence and prevalence of viral infection. Finally, his third chapter focuses on developing an automated process of assigning pollen sources by color recognition. Bees collect pollen from an assortment of flowering plants, and understanding their ever-changing floral resources is important for proper bee management. Carl's exciting new procedure may someday enable beekeepers to take a simple picture of collected pollen on their smart phone and immediately identify the floral sources from which it derives!

While Carl will be moving on (hopefully to a mathematics teaching position), fortunately for us James has decided to remain in our program for a Ph.D. degree, so we look forward to his continued work on queens. In both cases, we're very proud of their accomplishments and congratulate them on their degrees.

## NCSBA Featured Beekeeper: **Paul L. Madren, Jr.** by Amy Moyle



**Charles Heatherly refers** to Paul Madren as “the father time of the North Carolina State Beekeepers Association.” When you begin to see how much Paul has contributed to the NCSBA, you realize how apt this description is. Paul has been active in North Carolina beekeeping organizations since being one of the organizing members of the Wake County Beekeepers chapter in about 1968. He initially served as Vice-President of the chapter and then served as President of the chapter for 2 years. At the time, Paul was working for IBM and early Wake County Beekeepers meetings were held in the IBM library.

Paul became active in the NC State Beekeepers Association in the 1970s. One of his first duties was to help with the rewrite of the Constitution and Bylaws that was ratified at the Summer State Meeting in 1975.

In the 1970s, the NCSBA had 3 directors instead of the 12 we currently have. One was assigned to oversee the treasury. Paul was one of the other two directors who split the state and were responsible for coordinating with the chapters.

In 1996, Paul became the Treasurer of the NCSBA and remained in that position for 15 years. When Paul became treasurer he put the membership information into a Microsoft Access database and got rid of the manual lists and index cards that were in use up to that point.

In addition to being NCSBA Treasurer, Paul also took over the production of the NCSBA Yellow Book from Dr. Ambrose and had that position for 7 or 8 years before turning it over to the next editor in 2011.

In 1999, after flooding caused by Hurricane Floyd destroyed many beehives in parts of the state, the NCSBA replaced around 70 hives. Don Moore reports that Paul was the primary coordinator in Wake County and with a few others, drove one of the trucks and delivered bees and equipment to one of the eastern counties.

Paul worked closely with Dr. John Ambrose over the years to help advance the goals of the NCSBA. In 2014 when Dr. Ambrose agreed to take on the role of President of the NCSBA, he called on Paul to take on one of the open VP positions that is responsible for setting the agenda and acquiring speakers for the state conferences. Since Paul had been actively involved with the conference management during his years as

Treasurer, he agreed to once again help. He served as 2nd VP for less than a year before moving into the 1st VP position he now holds.

After moving to Mount Airy in 2002, in addition to his involvement with the NCSBA, Paul became active with the Surry County Beekeepers Association. He served as Treasurer for 3 years, has taught bee school for many years, and has served in an advisory role when needed.

Throughout all of his years with the NCSBA and the Wake and Surry chapters, Paul has also worked on a long list of committees or has been available to support others within the organization. He's been a mentor to many of us, like Membership Coordinator Laurie Shaw who worked with Paul to take over the membership records and conference registration duties, or Eugene Brown who credits Paul with helping him with NCSBA history and background when Eugene was visiting chapters in the mountain region as a freshman Regional Director.



Photo: Amy Moyle

### *Teaching with an Extension Hive - 2012*

The most consistent comment I heard from folks interviewed for this article was best said by Susan Fariss, “Of all of the helpful people I have worked with in the NCSBA, Paul Madren was the most available, responsive and helpful. Paul is a tremendous resource on all things involving the function of the NCSBA.” Like Susan and myself, Paul has been the go-to guy and a

reliable resource for anyone needing to get up to speed on the workings of the NCSBA. One of the things many of us have come to learn is that when Paul is firmly committed to a point of view, it means that he is seeing something we may not yet be able to see and we need to pay attention.

With the exception of selling honey, Paul is really a hobby beekeeper, but it's a hobby that he clearly loves and attaches great importance to. Paul began keeping bees in 1960 when a swarm landed in his back yard while living in Baltimore, Maryland. He gave up beekeeping briefly when his job moved him to Boston, MA and Lexington, KY but he started keeping bees again when he moved to Raleigh in 1966. Since then he's had bees in Wake County, Surry County, and in the Virginia mountains. When the NC State Master Beekeeper program got under way, Paul jumped in with both feet and achieved the NC State Master Beekeeper level in 1985. In 1995, Paul completed the Master Craftsman Beekeeper requirements. The evaluation team for his oral exam consisted of Dr. John Ambrose, Dr. Keith Delaplane (University of GA), and Dr. Mike Hood (Clemson University, SC). Paul received his medallion at the summer meeting in July 1996 along with 3 other Master Craftsman Beekeepers who completed their requirements after Paul. Currently, he's one of the six NC State Master Craftsman Beekeepers.

Paul Lee Madren, Jr. was born in 1931 and grew up on a small farm in Alamance County near Ossipee, NC. After high school, Paul attended Morehead City Technical Institute (a new community college concept started by NC State that became what is now Gaston Technical Institute). He graduated with an Associate degree in Electrical Technology and went to work at Duke Power in the relay protection area. In the 1950s, Paul volunteered for the Air Force and attended electronic school at Keesler Air Force base before going to Korea. After being discharged from the Air Force, he married Margaret Jenkins of Mount Airy and attended NC State University. Paul graduated in 1959 with a degree in Electrical Engineering.

For the next 30 years, Paul worked in the high tech world for companies such as Bendix, Raytheon, and IBM. He moved as work required to Maryland, Massachusetts, and Kentucky before coming back to North Carolina with IBM in 1966.

Over the years Paul had opportunities to work on cutting edge products and to meet and work with many notable scientists and engineers. While at Bendix, he received patents on a number of designs including a high-speed analog to digital converter. While at Raytheon, Paul met Werner Von Braun and worked on the first projects to transmit images from

rockets--technology that was used to show pictures from the moon walk and was the precursor to what we now know as digital TV.



Photo: Amy Moyle

**Paul uncapping honey - 2012**

Back in North Carolina with IBM in the mid 1960's, Paul worked on the first network based audio response system that became what we think of as the 411 systems of today. He worked on the first distributed data systems that allowed the phone companies to access data stored in a central location and also on the first number recognition systems.

While still with IBM, Paul's experience in the telecom arena brought him to the attention of the FCC and State Department, where he served as the communication liaison official for IBM and also served on a five man team supporting Judge Harold H. Greene on technical rulings associated with telecommunications at that time. He also served as chairman of several technical committees, developing interface standards for the telephone industry and served on other technical telephony committees. In 1983-84, Paul participated in a committee that set the parameters for today's Internet. During the last 6 years of Paul's career, he was a member of the United Nations - Consultative Committees International Telegraph and Telephone (CCITT) that established the guidelines for the current international communication system.

Paul retired from IBM in January 1990 and moved from Cary to Mount Airy in 2002. Paul and Margaret have 3 children—Rebecca, Paul III, and Elizabeth. They also have 5 grandchildren. Margaret passed away in 2007. In addition to all of the beekeeping activities Paul does, he also is a member, deacon, and Sunday school teacher at First Baptist Church in Mount Airy and is a member of the Rotary Club. Paul also enjoys a good round of golf two to three times a week.

*Continued from previous page*

Between spending time with his children and grandchildren and his other activities, we're not sure how Paul finds the time to support the beekeepers of North Carolina, but he does and we are grateful. Joanna Radford from the Surry County Cooperative Extension Office says, "Paul Madren is one of the most knowledgeable beekeepers I know. He understands the honey bee and has a true love for them. I have a great admiration for Paul and feel very fortunate to have him as a beekeeper in Surry County. It has been a joy and honor to work with him." Don Moore sums things up when says of Paul "that he has not been one of those guys that comes in for a few years then fades away. He has been a mainstay and a strong supporter of the NCSBA." In July 2007, Paul received the McIver-Haas Lifetime Achievement Award, the most prestigious award of the NC State Beekeepers Association, for his 40 years of outstanding contributions to beekeeping and to the Beekeeping Industry.




*Photo: Amy Movie*

*Sharing his passion: Signing up a new member*



We carry all of your beekeeping essentials:  
woodenware, tools, protective gear,  
queen rearing supplies & everything needed  
to extract & bottle your own honey.  
We also sell bees!

**737 Irish Potato Road   Concord, NC 28025   (704) 784-0101**

Email Us at: [BeeSupply@carolinanc.com](mailto:BeeSupply@carolinanc.com) 

*Serving Cabarrus and the surrounding counties since 2002*

**HONESTY \* INTEGRITY \* QUALITY**



## 5CBA Hive Increase Project Update

by Dianne Saunders

**The goal** of the Hive Increase Project (HIP) is to demonstrate to our club's newest beekeepers how to increase the number of colonies by splitting existing ones. At the same time, they get hands-on experience and more confidence in managing their own hives. We started in the spring of 2016 with one nuc, and then we grew and split it repeatedly. Now there are six colonies going into the winter. This project provides learning opportunities for all of us. There are always surprises!

On October 9th, we checked all of the hives to make sure that each contained a laying queen. It's important to feed and keep building the bee populations so that

the colony is large enough to stay warm and survive the winter. Piedmont area winters are mild in comparison to many places, but we do experience cold snaps down to single digits. The average first frost date is at the end of October.

During our October inspection, we found that one of the hives that we chose not to split in September had queen cells on multiple frames! We took out one of the frames with two queen cells on it and left the others in the original colony. Our club member Greg Wolgemuth placed the frame in his observation hive, along with two frames of capped brood from one of his own colonies. A queen emerged on October 15th, and by October 30th she was laying eggs. At the end of December, she was still laying eggs and the observation colony seems to be doing fine. Watch for an update of the HIP in the next edition of the *Bee Buzz* to see how the six colonies and Greg's new queen bee fared through the winter.



**Beekeeping Supplies • Package Bees & Queens**

**Sapony Creek Apiaries**

6154 West Mount Drive  
Rocky Mount, NC 27803

Phone: 252.904.1446  
saponycreekapiaries@yahoo.com

**New Store Hours**

Tuesday – Saturday 10:00 AM – 6:00 PM

# BeeFeeders

## North Carolina Pollinator Plants

by: Ulana Stuart, Master Gardener

**The wonderful thing** about spring is there are so many plant choices for bees. This column will focus on four spring BeeFeeders that you may not have considered.

**Redbud** (*Cercis canadensis*) is a small native tree which grows throughout North Carolina. Redbud is a delightful harbinger of spring being the first native tree to show dense purplish pink flower clusters that are fragrant. Redbud can be grown as a specimen, in a grouping, as a street tree or understory. Redbuds prefer fairly well drained moist to dry (drought tolerant) soil conditions, with part to full sun exposure. This fast growing tree will go from a seedling to 3-5 feet in height over 2 growing seasons and up to 40 foot in maturity. Redbud flowers provide pollen and nectar for honey bees and bumble bees.



Photo Courtesy Ulana Stuart

**Redbud** (*Cercis canadensis*)

**Dwarf fothergilla**, (*Fothergilla gardenii*) occurs naturally on the North Carolina coastal plain. It is one of the showiest native shrubs attractive year round especially if grown in full sun. Fothergilla prefers moist but somewhat well drained soil and tolerates part sun. It grows 2-5 feet tall with conspicuously showy, fragrant white brush-like blooms in the spring. Fothergilla 'Mount Airy' is a widely available cultivar that grows well throughout the state. It is quite vigorous and grows 5-8 feet tall. 'Mount Airy' can be cut back hard and has larger flower clusters than the original plant. It provides both pollen and nectar for all types of bees.

**Wild indigos** (multiple *Baptisia* species) are beautiful late spring perennials which grow throughout North Carolina in moist to dry soils with reasonable drainage and require full sun. They grow 3 to 4 feet tall and form



Photo Courtesy Ulana Stuart

**Yellow wild indigo or "Horsefly weed"** (*Baptisia tinctoria*)

small "bushes" with 3 blue-green leaflets on the stem. The showy pea-like flowers attract all bees. For beekeepers the fast growing **Yellow wild indigo** or "**Horsefly weed**" (*Baptisia tinctoria*) has smaller yellow flowers which are the ideal size for honey bees to collect plenty of pollen and nectar.

Finally, **Henbit** (*Lamium amplexicaule*) is a small (4-10 inches) weed (originally from the Mediterranean) which has widely naturalized in the eastern US. Many of us remove/control weeds in our lawns and gardens but recent NC Botanical Garden field reports describe henbit as a huge draw for honey bees. All my published sources list henbit as a great pollen and nectar plant for bees. Take a close look at the henbit pictures shown here and allow this weed to thrive in your yards this spring. Your honey bees will thank you with extra honey!



Photo Courtesy Ulana Stuart

**Henbit** (*Lamium amplexicaule*)



*The main stage for National Honey Bee Day features Debbie Chunn as bee mascot "Beetrice", and Jo Daniels as they announce prizes and activities during the National Honey Bee Day celebration.*

## "Beetrice" Buzzed the County During National Honey Bee Day

by Robin DeMark

future festivals. The name, "Beetrice" was submitted by a child participating in the character naming contest at Bee Day."

According to Jo Daniels, event coordinator, the event attracted more than 500 visitors from Wayne and surrounding counties. "This year was exceptional, with generous support from local media, our bee club members and community volunteers," said Daniels. "In addition to having a new mascot, we also had several local bands volunteer to perform for the first time to support our cause. Stories, interviews and social media educating the public about honey bees prior to this event helped our National Bee Day get highlighted across the state." Daniels expressed her appreciation to several media outlets for their news features in Our State Magazine, WGBR Radio, and Goldsboro's Channel-10 with Wayne Alley, the "Buzz" and "Go" Magazines, as well as the local newspaper, the Goldsboro News Argus.

"This event grows each year because people return to see the live observation hive and learn why honey bees are so important to agriculture and pollination," said Buddy Scott, president of Beekeepers of the Neuse. "Our local honey sales help support our organization. We see families smiling and telling their friends about what they've learned as we sign-up new members for the annual bee school. All of this energy from everyone pulling together is the key to our success."

**There's a new** life-size bee buzzin' around Wayne County that caught the attention of humans and furry friends alike, as Beekeepers of the Neuse celebrated National Honey Bee Day at Waynesborough Park in Goldsboro, NC on Aug. 20, 2016.

Volunteers and local beekeepers gathered to host a fun-filled family event that included face painting, candle dipping, music and special guest appearances by their new bee mascot, "Beetrice." The mascot was created by Debbie Chunn, beekeeper and membership coordinator. "I wanted to have something fun for everyone this year, so I introduced the bee character as a surprise at one of our membership meetings," said Chunn. "Everyone loved it! I knew then she was going to be a great addition at our national celebration and



## Volunteering at the NC Zoo in 2017

Is volunteering at the Honey Bee Garden at the N.C. Zoo on your list of "things to do" this year? If so, don't forget that all volunteers must go through an initial training and orientation, which are held in the Spring.

Please contact Judy Pick at [jimjudy9@aol.com](mailto:jimjudy9@aol.com) for more information.

If Zoo volunteering is not on your 2017 to-do list, please consider adding it!



The Honey Bee Garden relies on volunteers like you to keep it running. It is an excellent opportunity to "talk bees" with the general public and in doing so, test your existing knowledge in a fun, relaxed environment. Zoo volunteering may also be used toward fulfillment of requirements for certification with the Master Beekeeper Program. Don't miss out! Make your plans now!



- Great Customer Service
- High Quality Supplies
- Your Neighbor since 1976

**Family Owned and Operated**

496 Yellow Banks Rd.  
North Wilkesboro, NC 28659  
Phone (336) 670-2249  
Toll Free (888) 848-5184  
[www.millerbeesupply.com](http://www.millerbeesupply.com)

Looking for a place to begin?

## Basic Starter Kit

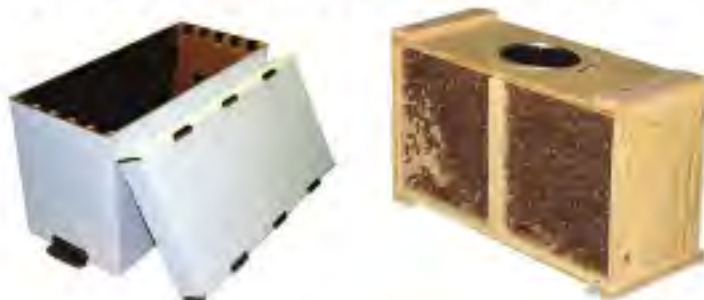
All the essential equipment to get started this season



**Call to Reserve**

3lb. Package of Bees or 5 frame Nuc on February 1<sup>st</sup>, 2017.

**Package Bees & Nuc's are PICK UP ONLY!!!**



Already established?

## Complete Hives

Grow and expand your colonies



# The Right to Bee and the Etiquette of Beekeeping

by Lane Kreitlow

**So enraptured are we** by our bees that it's hard to imagine that not everyone loves our girls as much as we do. In fact, not only do some people merely *not love* our bees, there are some that downright despise them, and might even try to make life difficult for us as a result. A hard truth to face a beekeeper is that there are people out there who are simply not feeling the bee love. We beekeepers are generally a docile bunch, but *dis* our bees? It is, dare I say, *beelasphamy*!

There are laws and regulations governing one's right to have bees on their property. However, these laws vary widely and beekeepers should understand and abide by those ordinances that are specific to their area. Still, we all live in the same world so if we want to exist harmoniously even when we are within our rights to keep bees, we need to exercise a little something called beekeeping etiquette. *Etiquette* may be defined as "the rules indicating the proper and polite way to behave". In general, beekeeping etiquette brings to mind what we can do as beekeepers to foster good relations with our neighbors. We can also encourage our bees to act in a "proper and polite way". Yes, I am totally anthropomorphizing here but for the sake of clarity, there are things we can do as beekeepers to promote good human relations, and there are things we can do to encourage our bees to act "neighborly" as well. Practicing good beekeeping etiquette will go a long way in deflecting the drama of a *beelasphamous* neighbor.

Bees are wild animals and yet, as insects go, they are the most intelligent of the bunch and are even capable of learning. There are many things we can do to encourage a more favorable behavior from our bees and by extension, their etiquette. These considerations are especially important for urban beekeepers, but of course everyone should practice good beekeeping etiquette. The following are some of these things:

1. **Hive placement:** For starters, place your hives as far away from your property line as possible. There is no need to start a war with your neighbor. Be considerate and place your hives where they will not be a constant reminder to your neighbor that there are tens of thousands of stinging insects living next door. With proper placement, your neighbor may not even be aware that you have bees unless you tell them. "Out of sight, out of mind" applies here. However...
2. **Bee Transparent:** Alerting neighbors of your plan

to keep bees on your property is common courtesy if there is a chance a neighbor will discover the hive(s) unexpectedly, such as the case where neighbors might use your yard as a cut-through. Don't let them find out by accident! This is of particular consideration if there are kids or pets involved. In fact, some zoning laws *require* that you inform neighbors of your intent to keep bees on your property. Know the ordinances specific to your area, and abide by them. A simple warning sign indicating that there are beehives nearby might suffice.

3. **Public Places:** It should be obvious that placing your hives near a school, playground, or any other high-pedestrian area is not good beekeeping etiquette. Also be mindful of where phone lines, power lines, or water meters are so that utility workers will not have to come near your hives when performing maintenance or repairs. Ditto for mail or deliveries. Postal carriers already have to deal with dogs during their day; don't add to their stress by placing beehives near your mailbox or front porch!

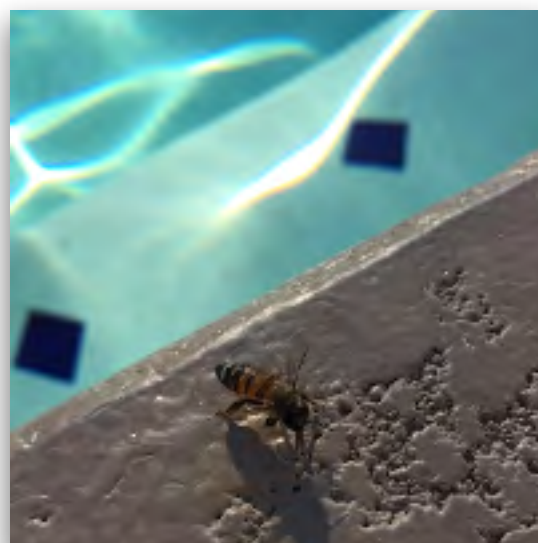


Photo: Lane Kreitlow

*Swimming pools are a tempting water supply*

4. **Water:** Ensure there is a continual water supply for your bees, and provide one if there is not. We are really good when it comes to feeding our bees, but we sometimes forget that they may need help with water, too. Minimize bee visits to your neighbor's swimming pool, birdbath, or the water fountain at the park across the street by providing a closer source of water for them.
5. **Flight Path:** Construct a fence or hedge that will encourage a higher flight path for your bees. Bees tend to remain at the elevated flight path when they have to fly up and over a barrier. In placing your hives where

there is such a barrier, you will reduce the bee traffic in your neighbor's space, especially in yards that are close together. If a fence or hedge is not possible, be mindful of the flight path of bees entering and leaving the hive. Do not place your hives such that your bees will fly directly toward your neighbor's yard when they exit the hive. C'mon, play nice!

6. **Keep gentle bees.** It's true that some bee varieties are simply gentler than others. In the advent of Africanized bees, this statement will be a given when they reach NC. But even before then, consider the temperament of your bees. All races of honey bees can become overly defensive in times when they are diseased, hungry, or otherwise stressed. If your bees are overly defensive, remedy the situation by addressing the underlying problem or requeen, if necessary.

7. **Manage swarming.** Nothing elicits fear in many non-beekeepers quite like the site of a swarm of bees. While we beekeepers know that a swarm of bees is generally not to be feared, many people will because they have been socialized to do so. But let's face it: there is potential danger in a swarm of bees no matter how gentle they appear. That said, swarm management should be a top priority, especially if you live in an urban area. There are steps a beekeeper can take to manage swarming, such as adding more supers, keeping young queens, making splits, etc. Educate yourself on swarm prevention strategies, but know that bees will often swarm regardless of beekeeper intervention. As such, keep supplies on hand in the event that you have to trap a swarm when it is possible to do so (please see the article, *The Urban Swarm* on page 16).

## Etiquette for the Beekeeper

8. **Adhere to the law.** Whether or not you think it fair, there are local and regional laws regulating the keeping of bees that should dictate how many- if any- a beekeeper can have on their property, and under what conditions. Know your local zoning laws and respect them. And don't forget about HOAs, which may have their own set of rules. If you think the ordinances in your area are unfair, write to your legislators or take other action to try to get them changed. Just don't go rogue! Doing so is only going to give beekeepers a bad name, and possibly even incite more restrictive rules against beekeeping.

9. **Register your hives.** In North Carolina, registering your hives is optional but doing so is a good way to extend beekeeping etiquette not only to the general public but to other beekeepers as well. There are many benefits to registering your hives, such as notice of aerial pesticide application, an American foulbrood

outbreak or Africanized bees in nearby apiaries. But also in registering your hives, you will become part of the bigger picture and convey the attitude that "we are all in this together".

10. **Keep good records.** Keeping good records on your hives serves many purposes. For starters, it allows you to monitor the health and disposition of your hives. If your previously gentle bees suddenly become ornery you will know to requeen as needed. Don't rely on memory! Likewise, if you mark your queens, you will be able to keep tabs on her age, and by extension, better manage your hives for swarm prevention.

11. **Don't work your hives when people are nearby:** Obviously, anytime you work your bees you rile them up so don't work your hives when your neighbor is outside doing yard work, or the kids are outside playing. Try your best to conduct inspections when there is nobody close by, and under favorable conditions. The optimal time to work your hives is mid-morning on a warm, sunny day with little wind. In addition, the proper use of a smoker will go a long way in keeping your bees calm while you are working them.

12. **Education:** Educate your neighbors to the best of your ability on the value of honey bees. Fear is often born out of ignorance so inform the uninformed about why honey bees are so great, and why foraging bees are not to be feared. Lessen the proverbial sting of having bees nearby by spreading the bee love.

13. **Bribery:** People generally warm up to the idea of having bees in their area when they reap some of the tangible benefits. Bribe naysayer neighbors with honey, beeswax candles, bee-pollinated plants or vegetables, blueberry pie, or whatever else you think will win them over.

In practicing good beekeeping etiquette, you are demonstrating to your neighbors that you respect their concerns about having bees near them, while at the same time exercising your legal right to have them. There will always be those neighbors who are resistant, no matter what you do. Do your best to maintain a respectful attitude toward them, but know that you can't please everybody.

*A special thanks to Rick Coor for his input on this article.*



Photo: Lane Kreilow



## Now Supplying All of your Beekeeping Needs as the One-Stop Source for Beginners to Professionals

Visit our exciting new gift shop stocked with a wide variety of premium gift items for those special friends and family.



From our own handcrafted woodenware to tools, extraction equipment, protective clothing, foundation, glassware and more ... if you need it for your beekeeping, we have it!

*Dedicated to serving our customers and saving our bees.*

ITALIAN QUEENS  
AND PACKAGE BEES

**Beez Needz**

FAMILY OWNED  
AND OPERATED

**Tuesday through Saturday 9-5**

3662 Edgar Road | Sophia, NC 27350 | 336.431.2339

beezneedz.com | facebook.com/beezneedz/



North Carolina State Beekeepers Association  
329 Laurel Street  
Mount Airy, NC 27030-2911

Non-Profit Org.  
US POSTAGE  
PAID  
ABERDEEN, SD  
PERMIT NO. 200



**1917 - 2017**

# CELEBRATING 100 YEARS

---

## EDUCATING FOR THE NEXT 100

*"Knowledgeable Management for Sustainability"*

# **2017 NCSBA Summer Conference**

**Winston-Salem - July 13, 14, & 15**

### ***Planned Featured Speakers***

**Jon Zawislak** ..... Jon is the apiculture specialist for the University of Arkansas with a strong background in entomology and botany. Extension and beekeeping education are some of his major interests.

**Dr. James Wilson** ..... Dr. Wilson is the new faculty apiculturist at Virginia Tech. With an undergraduate degree from NCSU and a PhD from VT, Dr. Wilson has plenty of beekeeping information to share.

**Katy C. Evans** ..... Katy was the 2015 recipient of the EAS Foundation for Honey Bee Research Award. This award made possible the research with Dr. Debbie Delaney at the U of Delaware that led to her Master's thesis. Katy now works with one of Dr. Tarpy's former postdocs, Dr. Margarita Lopez-Urbe at Penn State University.

*This is the 100th Birthday  
celebration of the NCSBA  
A special agenda and history  
review is being planned*

## **Twin City Quarter**

**Marriott - Embassy Suites - Benton Convention Center**

**425 North Cherry Street, Winston-Salem, NC**

Check [www.ncbeekeepers.org](http://www.ncbeekeepers.org) for the latest updates