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North Carolina Bee Buzz Winter 2016



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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.

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From the Bee Buzz Editors:

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 c/o Lane Kreitlow, 7110 Eastridge Dr., Apex, NC 27539. Email article submissions to: Lane Kreitlow at **beebuzzcontent@ncbeekeepers.org**

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We often refer to the services that the NCSBA offers its members as benefits. The word "benefit" usually brings to mind something tangible like a pension, health insurance or a retirement check but don't expect to receive a check in the mail with RD Coor scratched on it! Instead, the benefits of being a member of the NCSBA are largely the services we provide. The leadership of the state association is a group of beekeepers that volunteer on a consistent basis to serve the members of the organization and promote the education of beekeepers. The work done at the state level is a broader version of what folks do in the local chapters who volunteer to serve as officers, mentors, conduct bee schools and make the NCSBA function on all levels. Whatever service one receives from the state association or a local chapter, it should be noted that the service was brought forth by a volunteer: volunteers are what make the NCSBA function.

The NCSBA publications are a means of service to the members, and recent changes have been made to improve their value. The effort expended by volunteers and editors to produce our publications require ability and dedication. The *Bee Buzz*, calendar and *Yellow Book* require time, thought and responsibility from the leadership, and the three publications consume better than one third of our membership dues.

The new *Bee Buzz* format offers the opportunity for members to submit articles and photos to be presented in an attractive color format. It brings with it intangibles such as a new look for our association in a publication that represents us well, and one that we can be proud to present. A goal of the *Bee Buzz* committee and editors is to have our members become more involved with the publication. We welcome information about your chapter or a beekeeper you know. It becomes a service when you read the pages, gain information, submit a photo or article, work in your chapter, or read the advertisements and patronize the businesses. But for those folks who do not read the *Bee Buzz*, it is not a service. To them, it isn't really anything.

Message From The President by Rick Coor

Our new calendar format can be found inside this issue. The calendar format used by the late Dr. John Ambrose was for many years a uniquely created and published item for the NCSBA; his fingerprints were all over it. The information, phrases and quotes he used had their own quality. It was a means by which Dr. Ambrose communicated with everyone in the association, and we had a great appreciation for it. In respect for the work of Dr. Ambrose, we will no longer attempt to duplicate or imitate the effort and thought that he put into his calendar. The traditional twelve month, hang-on-the-wall version is being replaced with a quarterly, reference-type calendar. After the current issue, each issue of the *Bee Buzz* will feature three months.

The goal of the calendar will remain the same: to provide a means by which to dispense beekeeper education. By including it in the Bee Buzz as opposed to keeping it a separate publication, it will take on the fresh, new look of the newsletter while saving the organization a significant amount of money that can be directed toward other goals. The decision to change the calendar format was made by executive committee members after careful consideration of the direction of the calendar, and upon the feedback from many individuals concerning the opportunity to include chapter submissions and photos for future editions. The new format of the calendar will highlight what the bees should be doing each month, as well as guide beekeepers in their monthly activities. It is not meant to be exhaustive, but rather a composite of what the beekeeper can expect each month from their bees, and the recommended management practices. It may be necessary to adjust the timing somewhat according to your region, but the gist of it should be similar.

Among our members, there are minds more creative than mine that can make the *Bee Buzz* and included calendar flourish. We already see the results of creativity at work with our *Bee Buzz*. It is our hope that we can also expand the educational value of the calendar so that it can also become a valuable service by which beekeeping education can be extended. We welcome your input as we make this transition.

NCSBA President

NC Bee Buzz - Winter 2016





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Learning On The Internet

by Ann W. Harman Master Beekeeper

informative webinars on an assortment of topics. But you need to be a member to benefit from those. However, information for beginning beekeepers can be found free on their site at www.abfnet.org.

Here is the way to spend a nasty winter day: visit the website of the American Honey Producers Association (AHPA) (ahpanet.com) and scroll down to Resources (on the left), then go to Beekeepers on the Web and open up Beehoo. You are now going to take a trip around the world!

Project Apis m. is an organization that raises funds for bee researchers. Their website is quite interesting, with an assortment of information, and even videos, about bees. You can also learn about the largest pollination event in the world—almond pollination. Pay a visit to the website at projectapism.org.

Everyone, even if you don't sell honey, you should visit the National Honey Board website frequently, www.honey.com. Here you can find information on honey itself, its properties, many recipes for honey, labeling information, and you can sign up for the free newsletter. The use and attitudes survey of 2013 is particularly interesting. There you can read about the misconceptions people have about honey. Spend some time on that the website; you will learn a lot.

Now for something completely different. Yes this site is based in California but the photos by Kathy Keatley Garvey of honey bees are spectacular. There is actually much information on the site about bees and monarch butterflies, too. The site is called Bug Squad but if you Google that you will get a list of pest control companies. So use this: ucanr.edu/blogs/bugsquad that will take you to the correct site. Then at the top or if you scroll down you will see where you can subscribe. There is a fascinating article titled Do Honey Bees Have Taste Buds. I will let you find this to read. (A hint—see where it says Tags.)

Have you ever found an insect or perhaps seen a bee but not a honey bee and wondered what it was? There is an identification site called Discover Life at www.discoverlife.org where you can find an enormous amount of information, plus have some fun with other insects besides honey bees. The amount of information is incredible.

Share these websites with others and with children. The internet can be full of rubbish, but these sites are all worthwhile. Enjoy a wintry day!

No matter where you live in the state, winter is here. Cold, windy, rainy, snowy and Spring seems far away. Except for a monthly check of the hives and finishing up equipment repairs, bee work seems over. But it is still possible to learn some news of bees. Bee research is still taking place, and the results being reported.

Now it's time to use your computer to find out new information. You are probably bored and cruising the internet anyway. Let's find out how you can subscribe to some very interesting sites and newsletters. True, not everything is going to be of interest to you but you can select what to read and simply punch 'Delete' if you are not interested. If any site is of no value to you then just 'Unsubscribe" and it will go away.

A good start is Catch The Buzz. This site is news 'hot off the press.' It is like receiving a newspaper article on every topic from new findings in research, new rules and regulations that affect beekeepers, to some interesting information from other countries. All you need to do is visit the Bee Culture site: www.beeculture.com then scroll down a little and you will see on the right how to subscribe.

Although this one is from the West Coast, the news about bees is for everywhere. It's called News from the World of Bees. You can subscribe (free) by contacting: publisher@agridigest.com. You may see links to Catch The Buzz articles on it.

Perhaps the oldest continuing newsletter is that of Dr. Malcolm Sanford. It is called Apis Information Resource Center News. It is free, also. Just email beeactor@apisenterprises.com and you can be added to the mailing list.

Two of the bee equipment supply companies have seasonal newsletters that contain good information. In addition, you can find announcements of new equipment and sales on these sites. One is from Brushy Mountain Bee Farm so go to www.BrushyMountainBeeFarm.com and scroll down to Join Our Mailing List. Another one is from Kelley Beekeeping. Open up www.kelleybee.com and scroll down to BeeFriend Us where you can subscribe.

The American Beekeeping Federation (ABF) has

"BeeFeeders" North Carolina Pollinator Plants

by: Ulana Stuart, Master Gardener

Late in October, I visited the native plant gardens of the North Carolina Botanical Garden in Chapel Hill and was amazed by the number of honey bees and native bees that I saw on the frost asters. Whole plant branches were literally bouncing up and down from the weight of the bees landing on and taking off from the blooms. I realized I had neglected to mention the **Frost Aster** (*Symphyotrichum pilosum*) in the Fall issue of the *Bee Buzz*. These daisy-like flowers are called frost asters because they bloom past the frost and have been seen blooming into December in the piedmont and the coast. However, these underappreciated plants are not readily found for sale.

One place to find frost asters is along our roadsides where NCDOT does not mow. The good news is that these plants volunteer practically everywhere in NC. My advice is to learn what frost asters look like early in the spring and don't pull them out. These flowers do best in full sun where the blooms and their bee visitors thrive.



Winter Aster

Another plant that blooms late autumn into early winter is our native **Witch Hazel** (*Hamamelis virginiana*). It is a late season pollen and nectar source. This hardy, maintenance-free, large shrub or small tree is deciduous and ignored by most pests. It grows to about 15 feet in height and spread. It grows best in full sun but tolerates partial shade, does need some drainage (don't plant in heavy clay) and will produce showy, spidery 1-inch yellow fragrant blooms.

American Hazelnut (*Corylus Americana*) is a great pollen source for honey bees that blooms in late winter or very early spring in the piedmont and in the mountains.



Witch Hazel

It is a deciduous shrub that grows 15-20 feet tall and wide, and has separate male and female flowers. The leaves emerge after the flowers bloom. This plant is easy to grow but the roots need some drainage and a healthy shrub will need some sunlight. American hazelnut is frequently available at nurseries.

There is still time to plant some bulbs for your bees in December that will bloom in late January into early February (depending on the weather conditions). Two very early blooming bulbs are:

- **Winter aconite** (*Eranthis hyemalis*), bright yellow blooms that are 1 inch across and 4-5 inches tall

- **Snowdrops** (*Galanthus nivalis*), ½-1 inch long white blooms hanging down, and 4-6 inches tall.



Winter Aconite

Plant these bulbs close to your beehives in soil that has some drainage (again no heavy clay) and in a sunny area. Both of these bulbs produce early portions of pollen and nectar.

Are you gardening for native bees? Consider this advice: allow your stalks and seed heads to stay standing through winter into very early spring. This will benefit your resident bees and will give the birds and beneficial insects food through the winter. Delaying your garden cleanup work also gives larvae a chance to develop into next year's pollinators.



NCSBA Library Update Winter 2016

We're adding another DVD to the collection! The DVD has to go to Raleigh to get its library number. Then it will join the collection and be ready for check out. It's a general topic DVD and is a good review program for everyone.

There seem to be fewer and fewer beekeeping DVDs available. Single topic videos are being made but not distributed as DVDs. The single topic videos vary from excellent to... you've got to be kidding meandering content with video that doesn't show the subject and audio you can't hear. How do you sift and winnow them down to the relevant content that shows you how to get and maintain a strong and healthy apiary? A part of that process is to keep looking for relevant DVDs. If you have suggestions, please let me know! Thanks!

Bob Kemper, NCSBA Librarian Kemper27530@gmail.com 919-731-2146



5CBA Hive Increase Project Update

by Dianne Saunders

It's time for the fall update on the Hive Increase Project (HIP) run by Tim Huffman and the 5CBA club. The project's challenge is to make as many as 12 colonies of bees within 18 months starting from just one nuc. This project gives our new beekeepers hands-on experience with many hives, each with its own set of problems to solve. They can take this knowledge back to their own hives, helping them recognize what is going on with their bees.

This summer, we were having trouble with some of the hives. The state inspector recommended that we test and treat for mites. A heavy mite load might be the cause of the brown-colored brood we observed in one of the hives this summer. The queens in two of the hives were replaced with queens with a better laying pattern from Tim's colonies. Their daughters also have a better laying pattern. Good nutrition is helpful, but genetics seem to play a bigger role in the laying pattern quality of the queens. Queens with poor performance should be replaced right away instead of waiting to see if they improve.

We decided treat the project hives that have varroa

mites with a method that is new to our area-vaporizing oxalic acid. Careful reading of the instructions on the oxalic acid labels and vaporizing tool revealed inconsistencies and questions. How much acid should be used? Is there an ambient temperature limit? How many treatments should be given? We discussed it thoroughly and decided on a routine that we would use for all of the hives. We used one gram per box of brood, excluding honey supers. Treatments were given once a week for three weeks, despite expected high temperatures in the mid 90s.

A special thanks goes to 5CBA member Greg Wolgemuth who has been feeding the bees twice a week for the last six months. Much of the credit for the growth of the colonies goes to him. Although we are not going to meet our initial goal of going into the winter with 12 single deep hives, we started with one nuc this spring and grew it into four single deeps and two double deeps. We're looking forward to continuing to grow these hives in 2017. Check for an update in the next issue of the *Bee Buzz*.



NC Bee Buzz - Winter 2016



Many of our beekeepers in the eastern part of the state were affected, some severely, by the recent flooding precipitated by Hurricane Matthew. If you or a beekeeper you know lost hives in this or any natural disaster, you may qualify for assistance through the USDA-FSA disaster assistance program for livestock.



Hurricane Matthew Relief



Flooded Hives in Eastern NC

For more information and to see if you qualify, please see: https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/2016/2016_elap_for_livestock.pdf





Wolfpack's Waggle: Happenings at the NCSU Apiculture Lab

by Lane Kreitlow

Even as the fall winds down and the bees are tucked in for the winter there is no rest for the weary, and certainly not for the hardworking folks at the NC State Apiculture Lab. From newly planted pollinator habitats and accompanying sampling, to analyzing a staggering dataset of bee virus information for the Bee Informed Partnership (BIP), to bioinformatics work, thesis writing and planning new projects for the spring, these folks are as busy as, well, you know.

One exciting new development is a proposed research program that will emphasize studies on the interaction of bees with microbes. Microbes play a critical role in many areas of study, including food production, environmental health, and even human health. The importance of microbe-plant, microbe-animal, and microbe-insect interactions cannot be overstated, yet students are often not introduced to the subject until later in their educational careers. This project proposes to introduce students to the topic earlier in their studies, in preparation for advanced education, or careers in industry or agriculture, particularly students from groups that are underrepresented in the sciences.

For all of you aspiring or seasoned beekeepers out there, don't forget about the great opportunity to learn more about bees and beekeeping from the comfort of your own home through the BEES program offered by NC State Apiculture and the NC Cooperative Extension Service. Courses, designed by Dr. David Tarpy, cover a wide variety of honey bee topics for beginners and experienced beekeepers. Never before has such high quality bee coursework been available at your fingertips! Invest in your education today by enrolling in a class. Proceeds will help fund the NCSU Apiculture Lab.

Not interested in actually becoming a beekeeper, but want to help honey bees anyway? The NCSU Apiculture Lab is always in need of support, either through monetary or material donations, or even estate gifts. To donate online, or for more information on the happenings at the lab, visit the lab's newsletter, the Wolfpack's Waggle, at

https://entomology.ces.ncsu.edu/apiculture/bees/.



NCSU Apiculture Lab

The recent merging of the Department of Entomology with the Department of Plant Pathology at NC State to form the Department of Entomology and Plant Pathology (DEPP), brings with it a de-emphasis on traditional extension duties, which may or may not impact the usual involvement of the NCSU Apiculture Lab in the judging of State Fair "Bees and Honey" competitions in the future. Time will tell, so stay tuned as more information becomes available. For now, thank you Dr. Tarpy, Jennifer Keller, and all of your hard-working lab members for your involvement to help make the NC State Fair an exciting time for all of us beekeepers out here!



Photo Courtesy Dr Tarpy

NC Bee Buzz - Winter 2016

Ever hear of MRSA (methicillin-resistant

Staphylococcus aureus)? How about MDR-TB (multidrug-resistant tuberculosis) or CRE (carbapenem-resistant *Enterobacteriaceae*)? These are life-threatening bacteria that have become resistant to antibiotic therapies. They are dangerous because our standard cures are no longer effective and it is getting harder and harder to find new antibiotics that actually work. This healthcare crisis should be a huge concern to all of us.

Part of FDA's response to this issue is to prevent the widespread use of antibiotics for nonessential purposes. For example, in the past, certain animal feed has often contained antibiotics not to cure a specific disease but because the animals grow faster and bigger when they are used. Part of the societal cost of this method of growth enhancement is bacteria that are increasingly resistant to the antibiotics. FDA's effort in this arena has finally caught up with beekeeping. In June 2015, the Agency issued a Rule (which has the same effect as a law) regarding Veterinary Feed Directive (VFD) drugs. Many antibiotics have previously been available over-the-counter (OTC), meaning that anyone can buy them from their supply store as easily as they buy paint or nails. The antibiotic drugs that the Agency have deemed "medically important" have now been re-categorized as VFD drugs, meaning that in future they can only be purchased with a prescription from a veterinarian who has direct familiarity with the animals for which the drug is being requested. I don't know about you, but in my area we have Large Animal vets and Small Animal vets but I've never come across a really, really Small Animal vet around here. So getting a legal prescription for my bees seems impractical.

The two notable bee-related drugs on the FDA's hit list are tylosin (Tylan) and tetracycline/oxytetracycline (Terramycin). Conspicuously absent is fumigillan (Fumidil); FDA does not yet consider it to be "medically important" for humans.

Why are tylosin and tetracycline used?

Beekeepers use tetracycline and its more recent cousin tylosin to treat hives for American Foulbrood (AFB). AFB is caused by a spore-forming bacteria, *Paenibacillus larvae larvae*, that is extremely destructive and extremely contagious in beehives. The reproductive spores lay in wait for the right conditions and, as best we know, can live "forever". The spores cannot be killed by any conventional antibiotic. Tetracycline and tylosin suppress the disease by affecting the vegetative (active growth) stage, preventing an outbreak, but they do not kill the spores or eliminate the actual disease.

"Good judgment comes from experience, and a lot of that comes from bad judgment."

-Will Rogers

Beekeeping for Dummies and other popular sources of information have commonly advised beekeepers to prophylactically treat colonies with tetracycline or tylosin every year to prevent an AFB outbreak. However many if not most apicultural experts see this as a very bad practice since it masks the prevalence of the disease. Once treatment stops, an outbreak occurs which can easily spread to other apiaries within honey bees' flying distance. There is no cure for colonies with active disease; the only practical recourse is to destroy the bees and deal with the spore-contaminated equipment. The greater wisdom is to not suppress the symptoms but rather to identify occurrences and aggressively destroy the disease at its source. Say you are in the market for a nuc. Would you prefer to buy from a beekeeper who says, "My colonies don't currently show the symptoms of American Foulbrood" or from one who can honestly say, "My colonies do not have American Foulbrood"?

What is American Foulbrood?

As mentioned above, AFB is caused by bacteria. Worker bees feed spore-contaminated food to young larvae. The spores germinate in the gut of the larvae and the vegetative stage of the bacteria feeds off of the larvae. By the time the cell is capped and the larva pupates, the disease overcomes the larva and it dies. The vegetative bacteria digest the larva, leaving a dark

Continued from previous page

scale on the bottom of the cell. The pupal tongue characteristically sticks up out of the scale, the only recognizable thing left of the poor baby bee. Before the vegetative bacteria dies, it creates as many as 100 million reproductive spores. These get picked up by the housekeeping bees that clean out the cell and are unknowingly spread throughout the hive. The cycle starts over when contaminated nurse bees feed the next batch of larvae.

The colony dwindles and eventually dies. Robber bees remove contaminated honey and carry it back to their own hives. Left unchecked, this process can severely cripple beekeeping in a region. The potential for harm is so severe that North Carolina created its Apiary Inspection Service nearly 100 years ago in order to detect and destroy American Foulbrood. Fortunately for us, in the past two or three years AFB has been found in less than 1% of the colonies that were inspected by the state inspectors, according to Chief Apiary Inspector Don Hopkins. To me, this is a testament to how well they are doing their jobs and how lucky we are to be within their jurisdiction.

What to do if you suspect AFB

There are several signs of AFB that beekeepers should always be on the lookout for:

- *Sunken, perforated cell cappings* caused by the decomposition of the dead brood inside

- *Ropey goo inside the cell*. Insert a toothpick into a suspect cell. Twirl it around a bit and then slowly remove it. AFB goo will be ropey and elastic, snapping back after an inch or so.

- Extremely foul, distinctive odor.

- *Dark scale on the bottom of cells* that is hard to remove. Often the pupa's tongue can be seen sticking up from the middle of the scale.

If you see any of these symptoms, contact one of our state bee inspectors. The list of inspectors and the regions they cover can be found on the NC Department of Agriculture's website under Plant Industry/Plant Protection Services/Apiary Inspection Services. Don't hesitate to contact them regardless of whether you have one hive or a thousand – their job is to assist <u>all</u> of NC's beekeepers, and nearly all of us have only a couple or so hives.

If you have a colony with AFB, your apiary inspector will help you eliminate the problem. The standard practice is to depopulate the hive (they are going to die anyway – it's better to do so before the disease spreads). In other states, the equipment that the bees lived in must be burned to kill the spores. However in North Carolina, we are unique in that the NC Department of Agriculture owns an ethylene oxide fumigation chamber. Our chamber is NASA surplus equipment: since ethylene oxide will kill any form of life in the known universe, its original purpose was to sterilize moon rocks. AFB spores are a piece of cake compared to microscopic moon creatures!



One indication of American Foulbrood is ropy goo that stretches several inches before snapping back

Your apiary inspector will help you get your equipment fumigated so that it doesn't need to be burned. He/she will even pick it up from you and deliver it back when it has been treated. The turn-around time varies by season of the year and demand. Fall is a good time to send equipment for processing because most people don't need it back immediately. There is a small fee for the fumigation service but if you don't think a piece of equipment is worth the cost of fumigation then it must go into the fire.

Woodenware and empty comb, in fact anything except honey and bees, can be processed in the fumigation chamber. The chamber is large enough to hold 40 deep boxes or 70 shallows.

Consequences of change in tylosin/ tetracycline status? FDA has pushed for manufacturers to implement the new regulations in their labeling by December of this year (2016). So tylosin and tetracycline will soon completely and permanently disappear from your favorite supply house. Once they go away as an option, what can we expect? One scenario is that beekeepers who have been prophylactically treating to suppress AFB for years will suddenly have outbreaks in their apiaries when treatment is no longer possible. Robber bees will spread disease from their collapsing colonies to the entire area. Those of us who have always had clean hives may start to have AFB issues, inheriting the problems of our neighbors. So we all must be especially vigilant over the next few years. Learn to recognize the symptoms of AFB (NCSU's "Diseases of the Honey Bee" is a good place to start). Make friends with your bee inspector. Above all, *don't be complacent*. Take immediate action if you suspect infection – call your inspector for confirmation and advice. Would you rather have the headline in the *NC Bee Buzz* read, "{your name} Stops AFB Threat Before It Gets Out of Hand", or "{your name} Causes Death of Countless Colonies in {your county} by Failing to Take Timely Action"?

Not all beekeepers are capable of becoming expert bee doctors, correctly diagnosing and treating every possible honey bee malady. However by regularly inspecting your hives, it is not difficult at all to learn to identify normal, healthy bees and brood. Then when you see something that doesn't look healthy, call on the specialists at the state inspection service. Not only will you increase the chances of saving your own bees, but you may save mine too!

Special thanks to Chief Apiary Inspector Don Hopkins for providing details on the NCDA fumigation chamber.

Randall Austin is a NC Master Beekeeper who keeps a few honey bee hives in northern Orange County. He can be reached at s.randall.austin@gmail.com.

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How was 2016? 2016 has been a great year, not just for the association as a whole but also for the Master Beekeeper Program (MBP). Over 800 beekeepers at 50 chapters took the Certified Beekeeper written test in 2016. We had an additional 180 test-takers at our state meetings and fall testing sites. That's nearly 1000 tests! Most of the credit goes to you and the 76 local chapter volunteers. Even with that many, our turnaround time is still approximately 1 week from when we get the information until a certificate is in the mail.

What is in store for 2017? I have asked each chapter to send me their monthly meeting programs that were used in 2016, along with suggestions for other meeting programs. Fewer than 10 have responded, but hopefully we will get a lot more after you have read this article.

What will we do with the information? A list of program subjects broken down to the suggested time of year for doing the program, along with a list of other potential programs will be published on the NCSBA

Master Beekeeper Program

by Paul Newbold Chairman Master Beekeeper Committee

website under the heading of the Master Beekeeper Program (www.ncbeekeepers.org). Hopefully this will assist chapters in planning the year's programs and bring a lot more subjects to the program committees that haven't been thought of yet. This is planned to begin in December and additions made as they are sent to us.

Another item that is still in the planning is Frequently Missed Questions. We are working on a way to educate without giving away the testing by helping to review the most frequently missed questions.

To further assist the chapters with their educational endeavors, we are also considering offering suggested curricula (class agendas) for Certified and especially advanced classes. Again, we are reaching out to those chapters that we know have offered classes so that our recommendations reflect the interest of the membership, as well as encouraging instruction in areas that are perhaps not often taught, but that are tested by the MBP. We have suggested a syllabus that will assist in planning beginner bee schools. Let us know how we can help you.

In addition, mini quizzes and games are already on the website for use as a study guide. Several chapters report using these as a part of their monthly meetings to help beginners, and also to challenge experienced beekeepers.



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The Brood Chamber: NCSBA's Next Generation Featured Beekeeper: Andi Bradsher by: Chris Apple

Each year, Orange County Beekeepers Association (OCBA) sponsors two young students 10 to 16 years old, who are interested in beekeeping. The organization supplies them with tuition for our beginning beekeeping class, two packages of bees, the equipment necessary to keep those bees and a mentor to help them along the way. It's a big investment, but the club feels strongly about the importance of encouraging the next generation of beekeepers. During my last year as co-president of OCBA, I received a call from Amy Bradsher wondering if we might be able to help her 8-year-old-daughter, Andi. Andi was very interested in beekeeping and hoped to raise money through the sale of honey to help finance her dream of going to Haiti as a missionary. The family had investigated the required financial investment and felt it was beyond their means. I was a little apprehensive about engaging one so young, but after speaking to her mother about her accomplishments thus far in her young life, I decided to ask our executive committee if they would consider it. I was able to convince them she was a good gamble. With the help of a very supportive parent, Andi was able to attend our 10-week beekeeping class from January through March of 2015, after which she passed her certification exam. Randall Austin, her mentor and a Master Beekeeper, has worked closely with Andi. Early in her beekeeping career she even rescued a feral hive living under a house with his help.

Randall sent me the following email about Andi: "She does LOTS of outreach, including organizing a trip to the Bayer Bee Center in RTP for her home school group, which she allowed me to tag along with. She always has cheerful eyes, even when stung. She asks questions -- probably the most important skill a new beekeeper can have -- and e-mails me back and forth until she gets a good answer. Her enthusiasm is infectious. She even laughs at my jokes, pretending that they are funny."

Andi has had some difficulties keeping her colonies alive through the winter, something many seasoned beekeepers have experienced. When she received her first two packages in the spring of 2015, one colony died due to a leak in the feeder, and another absconded. This year she is trying her hand at nucs instead of packages and hoping for better luck. Although she hasn't yet achieved her original goal of selling honey to help finance her missionary trip to Haiti, she hasn't lost her enthusiasm for beekeeping. Her accomplishments since beginning her journey as a beekeeper are many. Using products from the hive, she makes and sells sugar scrubs, lotion bars and lip balms under her trade name of Bee Simple to raise money for her mission trip to Haiti. She did a wonderful presentation about her first year as a beekeeper during OCBA's November club meeting.

Andi has managed to do a great deal of outreach. She gave a presentation on honey bees to her 4-H club, the Helping Hands Club, and taught them how to make rolled wax candles. She manned a Pollinator Day booth at Camp Chestnut Ridge on behalf of OCBA. She ran a booth at an Ag Day Festival at the Green Valley Book Fair in central Virginia. She taught a science class on honey bees at the Home Educators' Association of Roxboro. This year, Andi wrote her 4-H Record Book on her beekeeping ventures. For this she placed first at the county level and received a silver medal at the district competition. She participated in the NC State Fair, where she won a blue ribbon for a beautiful coloring book she created illustrating honey bee anatomy. She also won a blue ribbon for a bee sculpture as well as second place in the photography competition. She volunteered to help man the NCSBA honey booth at the state fair. And i is a member of both the Orange County Beekeepers Association and the North Carolina State Beekeepers Association, and will soon become a certified beekeeper.



One of the goals of OCBA as set out in our by-laws is to educate the general public about honey bees and the role of beekeepers in our society. Andi offers an example of all that we beekeepers, adults and youngsters alike, can do to help communicate the wonders of our honey bees and the joys of keeping them!



The North Carolina State Beekeepers Association 2017 Beekeeper's Calendar

Sometimes beekeeping is thought of as a springtime or warm weather activity but successful beekeeping depends upon year round observations and management. A good beekeeper becomes aware of the current weather conditions, e.g. periods of rain or drought, the plants that are in season to produce nectar and pollen, the main honey flows of a respective region, and how the honey bee behaves in response to environmental and seasonal influences.

In North Carolina, the landscapes begins as sand on the beach slowly becoming the coastal plain which gives way gradually to the piedmont and finally becomes land mountains covered by vegetation. Temperature and plant life varies gradually as the landscape changes. Spring comes earlier in the east and later in the west. The fall arrives later in the east and earlier in the west. This makes for varied conditions for our bees statewide. Just like the hen who notices the days becoming longer and soon begins to lay eggs, the bees can tell time also; longer periods of sunlight activate the natural calendars of plants also. This is a guide to help beekeepers begin to learn about the seasonal cycle of the environment and the honey bee. It has been said that the honey bee knows what is going on, we are the ones trying to figure it out.



Want to Volunteer at the NC Zoo in 2017?

If you are interested in becoming a volunteer for the Honey Bee Garden at the NC Zoo, please contact Judy Pick at jimjudy9@aol.com for more information. All volunteers must go through an initial training and orientation, which are held in the spring.

Beekeeper Tasks

- Emergency feeding (Fondant / Granulated Sugar) if hives are light

- Install mouse guard, if needed
- Clear up any dead bees and debris from entrance
- Get boxes and frames ready for Spring
- Read up on bees and attend local club meetings
- Order packages and nucs for the coming season

What Are The Bees Doing?

- Still in cluster, but may have moved up in the hive
- May take cleansing flights on warm days
- Brood rearing may begin
- Egg laying increases as the days get longer

Plants in Bloom

- Red Maple (Coastal)
- Henbit (Coastal)
- Dandelion (Coastal)

Photo: Lane Kreitlow

January 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
New Years Day						
8	9	10	11	12	13	14
		No	rth American Be	ekeeping Confer	ence & Tradesho	w
				Galveston, Texa	5	
15	16	17	18	19	20	21
	MLK Day				Coastal Red Maple (45)	
22	23	24	25	26	27	28
			-5			
29	30	31	1	2	3	4
2.9			-	£	2	~



Beekeeper Tasks

- On a warm day (70°F+) do first comprehensive inspection

- Look for good egg laying

- Continue emergency feeding (Fondant / Granulated Sugar) if hive is light

- All medications should be given at least 60 days before adding supers

- Continue getting equipment ready for Spring

- Attend bee meetings

What Are The Bees Doing?

- Increase in egg laying as the days get longer
- No drones yet
- Cleansing flights

- The bees will consume about 25 lbs of honey this month, so keep an eye on food stores

Plants in Bloom

- Red Maple (Coastal/Piedmont)
- Henbit (Coastal/Piedmont)
- Dandelion (Coastal/Piedmont)

Photo: Lane Kreitlow

February 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4
5	6 Piedmont Red Maple (40)	7	8	9	10	11 🕥
12	13	14 Valentine's Day	15	16	17	18
19	20 Presidents' Day	21	22	23	24	25
26	27	28	1	2	3	4

Much has been written about the plight

of honey bees in the US. The loss of family farms, changes in agricultural practices, and the advent of tracheal and varroa mites have contributed to beekeeper challenges. Bob Cole, founder of the Watauga County Beekeepers Association, points out that the significant loss of the honey bee is an imminent threat to the world's food supply. He encourages beekeepers to mentor one new beekeeper each year to meet the challenge of sustaining honey bees for pollination. We must sustain and support pollinators worldwide, specifically the honey bee, to feed the planet's population, which is estimated to reach 9 billion by the year 2040.

In response to Bob's directive, the WCBA asked what role we could play in the community. Education, advocacy and outreach seemed a likely place to begin. Increasing public awareness about honey bees and their unique role in the ecosystem, and attracting new beekeepers became our stated goal.

Initially, three volunteers became the education team, and with a box full of bee supplies they went off to fairs and community events. The feedback was incredible; people were interested in learning about honey bees, which led to thoughtful questions. It was enough to encourage the club to do more.

After formalizing our presentation, we approached K-6 elementary schools. An email was drafted and sent to the curriculum director of the county schools outlining our program and offering to design bee talks to address curriculum objectives. The director forwarded the email to principals, who shared it with teachers. Calls and emails came almost immediately. It was exciting to face 24 2nd grade students as they listened to a beekeeper introducing them to honey bees for the first time. Eyes dancing, minds racing, their voices called out:

"Why does the queen only live 2 years?" "Drones do what?" "Why are worker bees always girls?" "What do flowers do to attract bees, and why?" "Why are there so many bees in a hive?" "Is beekeeping fun? Are you ever scared?" "Are bumblebees honey bees?" "Do yellow jackets, wasps, and bumblebees make honey and live in colonies?"

"You are the honey maker?"

by: Doug Galloway and Mary Williams

Subsequently, we began contacting community organizations, such as senior centers, garden clubs, and parks. The club's education team soon grew from three to ten. Individual preference and location determined which team members would go where. Some enjoyed attending fairs, while others preferred classrooms. Fairs are less formal, and generally focused on information provided through handouts. School programs with specific objectives are more formal, lasting from 40 to 60 minutes, and are designed for groups ranging from 15 to 90 students.

We found the attached outline to be very helpful for school presentations. It provides structure, keeps the beekeeper on task and helps the team address specific teacher requests. It was developed early in the process and continues to evolve with our experiences. There is no one right way to keep bees. The same is true with education, since presenters have their own knowledge base, stories and presentation styles. The individuality of the volunteer presenters keeps the experience fresh.



Below are a few suggestions based on our experiences:

- Write a goal statement that will direct what you do as a club.

- Present with a partner and invite new beekeepers to go with you.

- Organize "show and tell" items such as pictures and models and use a tote bag for transport.

- Have hands-on items for people to feel, smell and observe.

- Allow time for interaction with students and adults.

- Be inclusive of cultural diversity and people with disabilities.

- Honey sticks are always a hit.

- In the classroom, allow for open questions especially with younger students.

- Take a seasonal bucket of blooming plants to explain pollination.

- Ask people to consider becoming a beekeeper and encourage them to attend one of your meetings.

- Challenge students and adults to be good honey bee stewards.

- Be prepared to be amazed and surprised.



The following comments from students and teachers are but a few of what we received and speak for themselves:

Dear Gordon: Thank you for teaching us about honey bees. I think I will now plant some flowers that they like. I liked how you are trying to save them by raising them. Thanks – Kylie 5th grade

Mr. Doug, Thank you for showing us the bees. Thank you for showing all the equipment! Thank you for the candy! Love Lucus 1st grade

Mr. Doug, Thank you for telling us about bees! My favorite part is when you said that boy bees are lazy! Yours Truly, Rosie

Comments from Teachers:

"I think what I heard most about your presentation is how bees aren't as scary anymore. I think kids have an innate

fear of them- and your presentations let them see from the bee's perspective. I think this is so important." 4th grade teacher

"I learned that ANYONE can "bee" a beekeeper! I was definitely inspired to want to try this. Now I just need to take a class! Also, I learned that some bees leave with the queen as a group in order to form a new colony. This is called swarming! COOL!!!!!!" 6nd grade teacher

"During Mary Williams' Bee Keepers program at Hardin Park, my students truly understood the importance of bees and how it directly affects our produce and us. They enjoyed getting to actually see the tools used by beekeepers and the demonstrations that Mary used to show how bees work together. Since the program, we have enjoyed watching our "pollinators" around our school grounds." 2nd grade teacher

"I think the greatest thing I witnessed was children encouraging each other on the playground to "Bee Still" when they encountered bees. It was also humorous when a substitute was swatting bees away and was told "It would be better if you took the "Bee Still Way". 1st grade teacher.

Our educational programs have enhanced our presence in the community and benefited our club. We are often recognized as beekeepers and people easily engage us in conversation about honey bees. Our teaching teams are learning from each other. Club membership and attendance have risen impressively. A new beginning beekeeping course is now being taught through Appalachian State University's Craft Enrichment Program. People are paying more attention to the decline of pollinators because of news reports, and they want to help reverse this trend. This year, through September, we have spoken to over 1000 adults and students. All of this is good news for honey bees.

Probably the hardest part of starting anything new is, well, starting. Sometimes our eyes are opened and we are challenged by children, other times we respond to the wise words of an experienced and trusted beekeeper. Either way, beekeepers have knowledge to share about the incredible and very social honey bee; all that's needed is an outlet for our passion in the form of an education program.

Contact Watauga County Beekeepers Association for more information: wataugabeekeepers.org

Doug Galloway, dmg623@hotmail.com Mary Williams, mwilliams155@gmail.com

Photos Courtesy Doug Galloway & Mary Williams



Doug Galloway ("Mr. Doug") Teaches About Honey Bees

Outline for Teaching Presentation

Ask the students: Does anyone know a beekeeper? **Vocabulary List:** Write on white board **Insect:** Any animal of the class Insecta, comprising small, air-breathing arthropods having a body divided into three parts (head, thorax, and abdomen), and having three pairs of legs and usually two pairs of wings.

Honey bee: Social insects: Beekeepers: Entomology - Entomologist: Queen: Worker: Drone: Pollinators: Pollen and Nectar: Steward/stewardship:

Teaching Outline:

- Where do honey bees come from?
- Role of the honey bee.
- Role of the beekeeper.
- Entomology/Entomologist.

- Who lives in the hive: Queen, drone, worker roles: nurse bee, cleaners, builders, forager, guard bee, water bee, ventilator bee, scout, undertaker bee, attendant, robber.

- How many bees live in a hive?
- Briefly describe a year in the hive.

- Beekeeper tools including smoker, hive tool, Benton queen cage, entrance reducer, SHB trap, frame lifter, queen marking pen.

- Math problem: If a bee makes 1/12 of tsp of honey during its lifetime, how many bees does it take to make one teaspoon and how many bees does it take to give your teacher a one teaspoon of honey for their toast everyday for a year?

- Vocabulary list.

- Show and tell: visual aids including burr comb, sample bees, hornets, yellow jackets, posters, photos, nectar sources, plastic model of stage bee development.

- Education Hive
- Jacket, veil, gloves
- Student questions
- PBS NOVA: Tales from the Hive



Foods Cooked with Honey Contest Winners - NCSBA Summer Meeting 2016

The "Foods Cooked with Honey Contest " was held on Friday, July 8, 2016 at the NCSBA Summer Meeting in Hickory NC. There were nine entries and we would like to thank all contestants for their participation. Winning contestants were recognized at the banquet on Friday evening. Best of Show was David Arnold's Applesauce Honey Banana Bread (Featured in the Fall *Bee Buzz* issue). Below are some of the highlights.

I would also like to thank Nora Fain, Debbie Talbert, and Marie Wooten for graciously judging the foods cooked with honey contest.

-Elaine Styers

Blueberry Chipotle BBQ Sauce 🙍

Melinda Miller



4 cups fresh or frozen blueberries

2 chipotle peppers in adobo sauce

- ³/₄ cup honey 3 cup ketchup
- 2/3 cup cider vinegar 1/8/cup balsamic vinegar
- ¹/₂ cup molasses 6 TBS Worcestershire
- 12oz tomato paste 1 tsp ground ginger
- 1 tsp garlic powder 1 tsp onion powder
- 1 tsp dry mustard 1 tsp liquid smoke
- 1 tsp black pepper 1 tsp salt

Puree chipotle peppers and blueberries. Put all ingredients in a stockpot. Stir thoroughly. Simmer on low for 30 minutes or until desired thickness.

Buckwheat Honey & Bourbon BBQ Sauce

Dorothy Butler

1 cup buckwheat honey



- 2 teaspoons dry yellow mustard
- 1/2 teaspoon cayenne pepper

1/4 cup Worcestershire Sauce

- 1 cup bourbon
- 2 cups ketchup
- ¹⁄₄ cup soy sauce ¹⁄₄ cup cider vinegar

In a 2-quart saucepan, combine all ingredients. Bring to a boil over medium-high heat, stirring occasionally. Reducing heat to low and simmer 20 -25 minutes, stirring occasionally until thickened. When cool, place in bottles. Sauce can be stored in the refrigerator for up to one month. Makes 5 Cups

Sweet Snack Mix Joan Jones ½ cup honey

2 cups Goldfish

1/3 cup butter

4 cups Rice Chex™ cereal

1 tsp vanilla 2 cups pretzels

¹⁄₄ cup brown sugar

3 cups nuts (almonds, cashews, pecans, and peanuts)

Spray a 13 x 9 pan with cooking spray. Mix goldfish, nuts, cereal and pretzels and spread out in pan. In a saucepan combine butter, brown sugar and honey. Cook over low heat till melted. Bring to a boil. Do not stir once boiling. Take off of the burner and let the boil subside. Add vanilla. Pour over dry mixture and stir. Bake 1 hour at 250°F. Stir every 15 minutes. When cool, break apart and store in container.

Honeyed Bread and Butter Pickles

Kenny Jones

- 3 pounds pickling cucumbers
- 1.5 pounds yellow onions
 2 cups honey
 3⁄4 tsp turmeric powder
 1⁄2 tsp celery seed
 2 tsp mustard seeds

¹/₄ cup canning and pickling salt

Mix cucumbers (sliced 1/8 inch, ruffled), sliced onions (sliced ¼ inch) and salt in a large bowl. Let stand refrigerated for 6 hours. Soak in water for 1 hour. Rinse thoroughly. - Mix honey, apple cider vinegar, celery seed, mustard seed, and turmeric powder and bring to a boil. - Sterilize two quart jars and once ready fill jars with cucumbers and onions to ¼ inch from the top of the jar. Add honey/cider mix ¼ inch from the top of the jar. Prepare a water bath for canning. Place jars in bath ensuring the top of the sealed jars are covered by 1 inch of water above the top of the jars. Bring to a boil for 15 minutes. Remove jars and cool.



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In the Apiary: Winter and Early Spring in North Carolina

by Nancy Ruppert, Apiary Inspector, NCDA&CS

Things are not looking very good in many NC apiaries this fall: too many hives have been hungry, causing slowed brood-rearing or even death from starvation; too many have gueen failures, and even many good queens have shut down their egg-laying earlier than normal; WAY too many hives have heavy varroa mite infestations; and unfortunately many hives were flooded out from Hurricane Matthew. Therefore, bees will likely be in even higher demand than usual next spring, so if you plan to order bees, this should be done before February to get the best quality. Those wishing to purchase bees should definitely use the principle of "buyer beware," getting bees from inspected sources whenever possible. A list of those with inspections and permits can be found at www.ncagr.gov.

Overwintering honey bee colonies successfully boils down to three things: LOTTA bees, LOTTA food (especially carbohydrates), and NOT a lotta pests/parasites (such as varroa). If your queen has been failing during the late summer and fall, you'll not likely have a LOTTA bees going into the winter, and you should consider combining hives that have fewer than four frames of bees in early December.

It won't be too late to help the bees store more carbohydrates if they're still alive by mid-December; thick syrup (2 parts sugar to 1 part water), candy boards or fondant achieve this very nicely. When the last half of February arrives, you can actually feed 1:1 sugar syrup to stimulate wax-building as well as brood-rearing. Starvation is quite common in February and March, so be very aware of food stores as bees begin rebuilding their populations through late winter. Consider supplementing pollen during late December or most of January, as many natural pollen sources get frozen out, and pollen supplementation can stimulate extra brood-rearing to give you more bees for April splits or honey production.

If varroa mite levels have not been addressed by November, it might be too late to do ANYTHING-by mid-November, most of your winter bees have already developed and may have been permanently weakened by varroa mites and/or the viruses that they carry. This scenario often causes a sudden collapse of population during December, January, or February as the summer/fall bees are gone and the winter bees were too weakened by varroa effects to survive into February; many times the bees that are left freeze to death because the population is insufficient to create enough heat for survival. Even if varroa mites were addressed prior to November, it's worth considering giving a dose of oxalic acid to the hive during the time between late November and mid-February, when there is likely to be little or no brood in the hive, and most of the residual mites can thus be removed from the hive.

If your winter population seems scant, wrapping the hive with insulation can be a life-saver. Just be sure that there is either a method of moisture escape/ventilation near the top of the hive, or something like a candy board or quilt box on top of the hive's uppermost box that can absorb the cluster's extra moisture.

Lastly, be getting equipment ready for spring, which will come upon us quickly. There have been wax shortages during many recent seasons, so get your supplies replenished. And the equipment between your ears (your mind!) can always use more fine-tuning so attend those bee schools and meetings!



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Beeswax: Beekeeping Beyond Honey by Shannon Baxter

Long before almanacs or weathermen or even Jon Snow, the bees have always known Winter Is Coming. It is this inherent knowledge that drives them to toil every spring and fall to put up stores. As their keepers, many of us harvest the sweet excess and are thereby left with another product of their labor: wax. What may elude us more than an ice scraper after a snow storm is what to do with all the wax cappings once extracting is done, aside from shoving them into a plastic bag and forgetting about them. With some ambition and a little effort, there is quite a lot that can happen with wax once it hits the bottom of the uncapping bucket.

Throughout the ages, beeswax has been used to solve life's problems and make the human condition better. As far back as ancient Egypt, it was used in the embalming and mummification process, which may not have solved any of life's problems but it did help with a few of the Afterlife's. In Medieval Europe, it was used as a unit of trade for taxes. Beeswax has even been documented in Greek mythology. The story of Icarus and Daedalus shows that beeswax was long used to adhere objects together as in the feathers that were fashioned into huge wings for Icarus' ill-fated flight to the sun. Beeswax has been used cosmetically for thousands of years, in healing balms and creams and also as a skin filler to mask pockmarks and hide blemishes. Once the primary ingredient in candles, beeswax is still very popular in votives because of how clean it burns. Another ancient use that still applies today is beeswax as a sealant. Whether to seal letters, waterproof, coat fruit, protect butchers blocks, or preserve an object's integrity, many of the ways in which beeswax was used as a sealant are still relevant today. Stradivarius used propolis and beeswax to condition his violins, and beeswax is still used today to coat musical instruments.

It is employed in varnishes and polishes, to protect tender mouths from sharp braces, as a hardener in soap, as an industrial lubricant, and as an adhesive. Beeswax is even used in art. Many of the ancient methods to create resists in batiking, figure sculpting, and encaustic painting, continue to be used by modern artists. Beeswax seems to be one of those examples of people recognizing, and knowing when to stick with, a good thing. So what does this all mean for the beekeeper that has a pile of honey-soaked cappings after the nectar flow? It means you have lots of options for what to do with your beeswax! Of course, before it can go into one of Madame Toussad's wax figures, it needs to be refined and cleaned. There are lots of YouTube tutorials, online articles, and techniques out there to help you obtain beautiful golden wax, as long as remember that wax is NOT something that you want to catch fire on your stove (unless you are really, really looking for an excuse to gut and redo your kitchen!) In the case of beeswax, a watched pot that never boils is a good thing.

Now you can decide how you want to use your beeswax. If you want to try your hand at some lip balms or skin care products, I have some recipes available on my website, www.baxtersbees.com, under the DIY tab because along with winter, the holidays are also coming. If nothing else, beeswax blocks are in high demand by artists and you can probably take your wax into an art supply store and make some good money. Some beekeeping suppliers also buy beeswax or will work out a trade for foundation. Whatever you choose to do with it, you can now consider beeswax another one of the beekeeper's sweet rewards!

Shannon Baxter owns and operates Baxter's Bees in Zebulon, NC.



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Bee Love by Lane Kreitlow



Around here, if you were to say, "I just looove bees" you would probably be met with affirming nods, or maybe a "I hear ya", or perhaps with an even more emphatic, "You're darn straight!" But even if met with silent affirmation, there is no doubt that, within our group, declaring one's love for an insect is not a social anomaly. In fact, it is a truth so obvious, it really goes without saying. We are an organization that has realized many great accomplishments in the name of our beloved. We do not need to verbally declare our love for bees because our actions say it for us. After all, we are *beeks*, and we are proud!

But saying, "I just looove bees" to people who aren't feelin' the bee love might just land you in a social purgatory. On one hand, anyone who holds that much emotion for anything be it an insect or a piece of chocolate cake must be on to something. On the other hand, bees are insects any way you spin it, with 6 legs, worm-like babies, a crunchy exterior, and the ability to inflict pain. For humans to looove them seems, well, a little odd to the uninspired. I have many friends who try, but really, they just don't get it. And I'm not talking about their not getting the pragmatic reasons people like bees- pollination, honey, or an environment statement. Nor am I talking about the fact that they don't get why one would choose such a painful hobby. These are obvious and need no explanation.

I'm talking about that undeniable passion that many of us have for bees, the love we have that would be there regardless of all of the great benefits of honey bees or whether or not it is our vocation. I'm talking about the pure joy that lights up our faces anytime we get the chance to talk about them, that thing that makes us boil over with excitement at the mere thought of them. I'm talking about enchantment, pure and simple. I have met enough fellow beekeepers to know that I am not alone in my fondness for bees (and "fondness" is putting it lightly). In fact, I know more beekeepers who looove bees than beekeepers who simply like them. There's just something about bees that lure us into making great sacrifices in time and money in order to be around them, even if it's only a hobby for us. It's not a stretch to say that I am a little obsessed with bees and I'm pretty sure I'm not alone!

Maybe some of you are closeted bee-obsessives, or perhaps you haven't even realized it yet that you, too, are powerless against the magnetic appeal of all things honey bee. If you are new to beekeeping and have not yet caught the bug (pun intended), I'm willing to bet that it's only a matter of time. Bee fever abounds, and it is spreading among us.

Often it starts with a spontaneous and innocuous mental "ding": *I think I want to learn beekeeping*, and then progresses to (sometimes slowly, sometimes quickly), *I really want to learn beekeeping and become a beekeeper*, until finally you graduate to, *I must become a beekeeper before I explode!*

It begins innocently enough. You purchase 2 packages of bees and all of the necessary equipment. You hook up with a local beekeeper willing to mentor you. You attend Bee School. You watch in utter fascination as your bees create a new home and life for themselves before your very eyes. By the end of the first season, you have a few jars of surplus honey. Not enough to write home about, but juuust enough to ensnare you; a carrot dangling in front of your face. A teaser. (Folks, that is *exactly* how gambling gets you!)

The next thing you know you are the proud new owner of 10 hives, and counting! Your formerly bee-less world is now abuzz with veils, smokers, hive tools, sugar (oh, the sugar), mite medication, beekeeping supply catalogs, bumper stickers and a new license plate to share your newfound passion with the world. Your time that you once considered "spare" is now flooded with bee activities, beekeeping meetings, volunteer work, and outreach programs. Your child's teacher is confused when you, an accountant, arrive at Career Day wearing a beekeeping suit. Your entire persona changes, almost overnight, from CPA to Beekeeper. You have reinvented yourself, and there is no turning back.

Trying to explain your passion for an insect to people who just don't get it (PWJDGI) is like trying to convince an Eskimo how much fun surfing is. But in all of our beekdom glory we try and try again to tease out some sort of understanding from them as we drone on about our bees. We search for the tiniest glint in their eyes that tells us that they do, indeed, "get" it. Once in a while we manage to convert the non-convertible. But most of the time, we are left standing in front of PWJDGI, deflated yet hopeful that someday our bee love will be better understood.

Not that we really care. No number of PWJDGI is going to make us change our bee-centric ways. Hey- if it's not bees, it would be something else, right? As for me, from Day 1 in Dr. Ambrose's Bees and Beekeeping class, I was smitten. Bee love set a career path in motion for me, and it is the muse that makes me want to create things in their honor. Now I realize that for some of you, beekeeping is business as usual, but for others of us, it is a driving force against which we are powerless- a force that makes us plow forward even though we know there is a chance we won't recoup our investment. Such it is with hobbies. But there's much more to life than money, and if hobbies teach us anything, it is that.

Though sheer fascination is enough to keep us coming back for more, keeping bees is an investment in something even deeper. For all of the lessons taught to us by the bees- the lessons of hard work, loyalty, perseverance, teamwork, altruism- beekeeping is far more than an interesting hobby or a typical day at the office. It is a primer of these lessons and how they impact our own lives, and makes them better. If only we listen. It is the proverbial rose that we are stopping to smell, an oasis among the mundane. Beekeeping is good stuff that is for sure.

So to all of you fellow beeks I say, to heck with PWJDGI, wear your bee badge with pride, and keep on spreading the bee love!



IMPORTANT REQUEST TO OUR MEMBERS AND CHAPTERS: PLEASE VERIFY YOUR CONTACT INFORMATION PRINTED ON YOUR 2017 MEMBERSHIP LETTER

Renewal season is upon us. Whether you renew your NCSBA membership through your local Chapter or directly with the NCSBA (via downloadable form or online at www.ncbeekeepers.org), please examine the information printed on your membership letter that is returned to you with your annual membership card. This lists your membership number (which never changes even if you rejoin after being inactive for many years), your name, mailing address, local Chapter, telephone number, email address, and preference for receiving the *Bee Buzz* newsletter (by email, U.S. mail, or none). If any of this information is incorrect or missing, please contact the membership coordinator Laurie Shaw at

membership@ncbeekeepers.org (preferred) or call her at 919-585-6052.

WE ESPECIALLY NEED YOUR EMAIL ADDRESS if it is missing from your letter because that means we don't have one for you. Up until November 2015, only the email addresses of individuals who chose to get the Bee Buzz by email were entered into the NCSBA database. However, all are being entered now if they have been provided to Ms. Shaw since then. We want to be able to directly email members when important NCSBA issues arise rather than rely exclusively on the Chapters to distribute this information. Your email address will not be used for any other purpose. Chapters, please share this request with your members. We ask that Chapters make a special effort to return membership letters in a timely way to their members who renew through the Chapters. The membership letters are usually sent back to Chapters for distribution to help facilitate the NCSBA renewal process (thank you!). If we don't have a valid email address and/or mailing address in the database for a member, they might not be receiving the Bee Buzz and therefore not even be reading this request! If you have any questions, please contact, Suzy Spencer, NCSBA Membership Secretary, at membershipsecretary@ncbeekeepers.org.

MEMBERSHIP RENEWAL REMINDER

Members, please renew as soon as you can. In order to get the publication date of the *Yellow Book* (NCSBA membership directory) back on-track, the deadline for renewals will be **March 7**. At that point, members who have not renewed will be marked "inactive". They can, of course, rejoin later and become "active" again, but they will not be included in the *Yellow Book*. Thank you!



Telling the Bees

Jerry Max Isley, Master Beekeeper and member of Rockingham County Beekeepers Association, passed away on October 1st. Jerry was an NCSBA regional representative for several years, and a member of several other chapters. Our sympathies go out to the family.



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

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2016 NC State Fair Highlights

Thanks to all those who participated in this year's "Bees & Honey" competitions!

