

North Carolina **Bee Buzz**

The Official Magazine of the NCSBA

Bees & BBQ

A Bit of History

2024 NCSBA Awards

Fall 2024



Only 8 minutes from
Durham via I-85 - Exit 164
Or 30 minutes from Raleigh via I-40 Exit 261

Walk-in - Order Online - Call



**Reserve
Your 3 lb.
Spring Packages
or NUC
Today!**

MULTI-PURPOSE
QUEEN CASTLE
AVAILABLE IN
8 AND 10 FRAME
PREORDER



baileybeesupply.com

919-241-4236

147 Boone Square Street
Hillsborough, NC 27278

Monday - Friday 9am - 5:30pm

Saturday 9am - 2pm

- Knowledgeable Customer Support
- Beekeeping Tools and Accessories
- Queen Rearing Tools and Supplies
- Woodware/Pine and Cypress

- Free Educational Newsletter
- Extraction Equipment
- Varroa Treatments
- Protective Gear

We Have All Your Glass and Plastic Needs!





North Carolina Bee Buzz

Fall 2024



Features



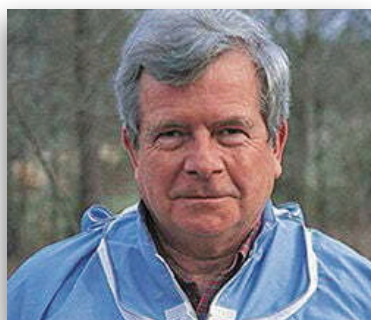
Bees and BBQ

17



Sam Coble Honored

21



A Bit of History

22



2024 NCSBA Awards

26

North Carolina State Beekeepers Association

~ Since 1917 ~

NCSBA Information	4
NCSBA Library Update	5
BeeFeeders	7
In the Apiary	9
Master Beekeeper Program	12
Wolfpack's Waggle	15
Internship at Triad Bee Supply	19
Research is Meant to Raise Questions	24
Summer Conference Photos	25



On the Cover:

Photo: Phil Uptmor

Blue Ribbon NCSBA 2024

Color Photo

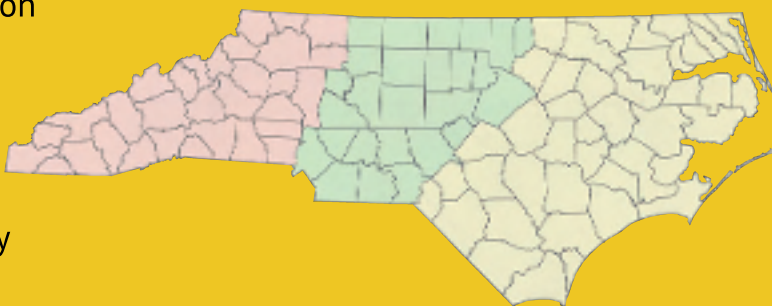
North Carolina State Beekeepers Association



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.

2024 Executive Committee

President: Rick Coor
1st Vice President: Gordon Goeking
1st Vice President (elect): Maryann Helton
2nd Vice President: Etienne Nadeau
Recording Secretary: Richard Dunnagan
Treasurer: Dale Aycock
Membership Secretary: Todd Walker
Extension Apiculturist: Dr. David R. Tarpy
State Apiarist: Don Hopkins
Past President: Doug Vinson



Regional Directors

Mountain Region

Senior: Willie Pascal
Junior: Scott Davis
Sophomore: Ron Duncan
Freshman: Dave White

Piedmont Region

Senior: Ira Poston
Junior: Christina Henthorn
Sophomore: Michael Entrekin
Freshman: Wade Turner

Coastal Region

Senior: Will Johnson
Junior: James Dove
Sophomore: Guy Wall
Freshman: John Marshall III

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

Webmaster Todd Walker webmaster@ncbeekeepers.org

From the *Bee Buzz* Editors:

Bee Buzz Story Submission Deadlines: Spring : Jan 14 - Summer: Apr 21 - Fall: July 21 - Winter: Oct 21

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. 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.

Bee Buzz Subscriptions: Please direct subscription questions and address changes to membership@ncbeekeepers.org

Jody Moore, *Technical Editor*
beebuzzeditor@ncbeekeepers.org

Dr. Lane Kreitlow, *Content Editor*
beebuzzcontent@ncbeekeepers.org



Attention Permanent, Life, and Honorary Members

Don't let this be your last paper copy of the *Bee Buzz*! Beginning in 2025, in order to receive mailed copies of the *Bee Buzz* we must have annual confirmation that your mailing address is still current. During a recent review of our membership database we found that we have been mailing copies of the *Bee Buzz* to members who have moved or are deceased, in some cases for many years prior. Help us prevent waste by keeping your contact information current.

There are multiple ways to update or confirm your address:

1) Visit the online Yellow Book at <https://yellowbook.ncbeekeepers.org>

There you can edit or confirm your contact information.

2) Email us at membership@ncbeekeepers.org.

3) Ask your local chapter to update/confirm your address with us.

4) Send your confirmation/updates by mail to: NCSBA, PO Box 99, Hurdle Mills, NC 27541

This only pertains to Permanent, Life, and Honorary Members. Annual Member addresses are updated/confirmed each year upon membership renewal.



NCSBA Library Update

TWO THINGS...

First, good news! There is faster and more direct access to the NCSBA collection. Here's how to get there: Type in waynecc.libguides.com. On the left column "Quick Links", select NCSBA Beekeeping AV Request, which takes you right to our collection. Follow the instructions and links to the bibliography and request form. Why not use the link on the NCSBA website? Because there is a glitch that takes you to a 404 page "not found" site at Wayne Community College. We are working on correcting that.

Second, a decision has not been made about adding books to the library, or keeping everything the same, or phasing out the library since it only contains DVDs, a format that is becoming obsolete.

The library's future direction will be discussed at the next Board meeting.

We are trying to create a program that will be an excellent source of information for all NCSBA members. If you have any questions or suggestions contact me.

Bob Kemper, NCSBA Fred Deer Librarian

kemper27530@gmail.com 919-731-2146



Everything you need!

From woodenware to bottles, suits to extractors and
all the tools in between!



Still Family Owned and Operated
Manufacturer of Quality Woodenware Since 1976

Come See Us!

**496 Yellow Banks Road
North Wilkesboro, NC 28659**

Open Year Round!

888-848-5184

www.millerbeesupply.com



BeeFeeders

North Carolina Pollinator Plants

by: Ulana Stuart, NC State Extension Master Gardener Volunteer

Honey bees always seem to pick the most nutrient-rich and fragrant water that they can find. This includes ponds, puddles, garden areas that tend to stay wetter, birdbaths, and especially saltwater pools. Wet compost, plant secretions and even recently turned soil attract bees. Bees' sense of smell guides their landing selection, and they are attracted by the scents of these wet locations.

Is there a soggy or wet part of your garden that doesn't drain well? This location is an opportunity to expand your plant palate. Fall is the best season to plant the following perennials in North Carolina, along with other shrubs and trees you want to plant. A big advantage of these three plants is that they all typically bloom during our late summer dearth.

seven feet tall. The showy, fragrant, pink flowers bloom in late summer. Joe Pye Weed prefers damp soils but can grow in sandy soils if there is enough moisture. It will naturalize in wetlands or open woodland gardens. Joe Pye Weed typically blooms for three to four weeks producing a good amount of nectar and pollen.

If the plant is too tall for your garden space you can cut it down halfway by mid-June, and it will regrow shorter and bushier. There is also a shorter cultivar available called 'Atropurpurea'.



Photo: Will Stuart

Swamp Sunflower

Swamp Sunflower (*Helianthus angustifolius*) is a native deciduous perennial, a member of the aster family and is found throughout the southeast. Swamp sunflower grows in USDA Zones 5-9 in moist, well drained to seasonally wet soil in full sun. You can spot it in wet ditches in late summer to early fall in North Carolina. It can grow three to eight feet tall depending on the growing conditions. Wet feet and full sun are best. The cheerful 3-inch yellow flowers with dark centers grow in clusters on top of each stem. This plant does have a strong urge to spread in garden conditions. If space is a problem in your garden, then you should keep it lean on fertilizer and water. You can use swamp sunflowers in the back of the border or naturalize them in wet meadows. Pollen grains are small and round with spines and the pollen pellets are yellow.

Ironweed (*Vernonia noveboracensis*) is an easy to grow native deciduous perennial that grows throughout USDA Zones 3 to 9. It grows in moist, well drained to seasonally wet meadows, bottomlands and stream sides. It does best in full sun and is clump forming.

Photo: Cathy DeWitt



Joe Pye Weed

Joe Pye Weed or Queen of the Meadow (*Eutrochium fistulosum*) is a tough native perennial plant found in low moist forest areas, marshes and ditches. It grows in full sun or part sun in USDA Zones 6-9, reaching four to

Ironweed slowly enlarges from a tough crown to reach a height of four to seven feet. Ironweed grows large flat-topped heads of small ½-inch purple flowers that bloom in late summer.

Ironweed is another plant that thrives in moist open areas or in the back of a border and attracts much wildlife. Ironweed height can be controlled by cutting the stems back halfway in June (same as Joe Pye Weed). Ironweed is a good source of nectar and produces medium round pollen grains with spines.

For more information on gardening use the North Carolina Extension Gardener Plant Toolbox at plants.ces.ncsu.edu

North Carolina
Extension Gardener
Plant Toolbox



Photo: Ester Westerveld

Ironweed

SAPONY CREEK APIARIES



Bees • Beekeeping Supplies
Products from the Hive • Queens

6154 West Mount Drive
Rocky Mount, NC 27803

Phone: 252.904.1446



NEW
STORE
HOURS

*Bee-Natural
Bee-Local*

*Tuesday-Saturday
10:00 AM-6:00 PM*

saponycreekapiaries@yahoo.com



Sapony Creek Apiaries



In the Apiary: Fall 2024

by By Dr. Josée Bourget, Keeper of bees
& Shirley Harris, Apiary Inspector, NCDA&CS

Happy Fall Y'all! It sure is nice to have cooler mornings to work our bees, right?

So here we are again, at the end of another honey bee year cycle. Year 2024 had a bit different start for many of us. Bees and beekeepers alike woke up to an early, frost-free spring with a good nectar flow, and colonies spawned offspring in a precautious yet spectacular swarming season that peaked around the spring equinox. If you managed to stay ahead of the swarm curve, your crop was a great one this year. Hopefully, you considered leaving some of the surplus for the bees. They work hard for it! Remember? Helping the bees stay healthy in preparation for winter ought to be a year-round affair as we know. Good nutrition means healthier bees, which translates to higher resistance to diseases and more longevity.

Summer temperatures and arid conditions always seem like an overnight surprise in North Carolina. But they are surprisingly well synchronized with the solstice, telling the bees that it is time to prepare for the next phase of the yearly cycle. Everything bees do from this point on is in support of winter "hibernation", which includes a gradual reduction in summer bee rearing. Winter bees begin brooding up right around the fall equinox. For those bees to be healthy good nutrition and consistent pest management are imperative during the brutally hot summer months; and your mite levels as bee population declines become critical. The question is: What does your scorecard look like at the time the *Fall Bee Buzz* arrives in your mailbox?

When the fall equinox arrives on September 22nd, when the sun is directly above the equator, it's a good time to ask ourselves if we did a good job helping the bees cover all the bases well. Assuming adequate food supply, those winter bees will be the difference between a colony that survives winter and one that does not.

- How are their resources? Did we feed them enough to help them stow away sufficient reserves?
- Did the varroa mite load stay within acceptable range?
- Do we see signs of viruses?
- What about signs of other pests like wax moths and hive beetles?
- How are the queens performing?
- Do we have weak colonies we need to combine? (So we may split them again in the spring)

NC Bee Buzz - Fall 2024



- Are their repairs needed to our apiary equipment before it's too cold to expose clusters?

It is normal to observe more hive beetles during those hot and humid summer days. You will typically find them corralled in dark corners or the inner cover, or on the IPM board if you use ventilated bottoms with a tray. There are many different ways to help alleviate hive beetle infestations but the bees will also help take care of business.



Photo: Josée Bourget

Beetle Bee-Gone Sheets

Answers to the questions listed above should guide us in our fall apiary plans. If we stayed on top of those well-known problems, then fall can turn into a bit of a reprieve, and perhaps a little time can be devoted to products of the hive, in preparation for the North Carolina State Fair.

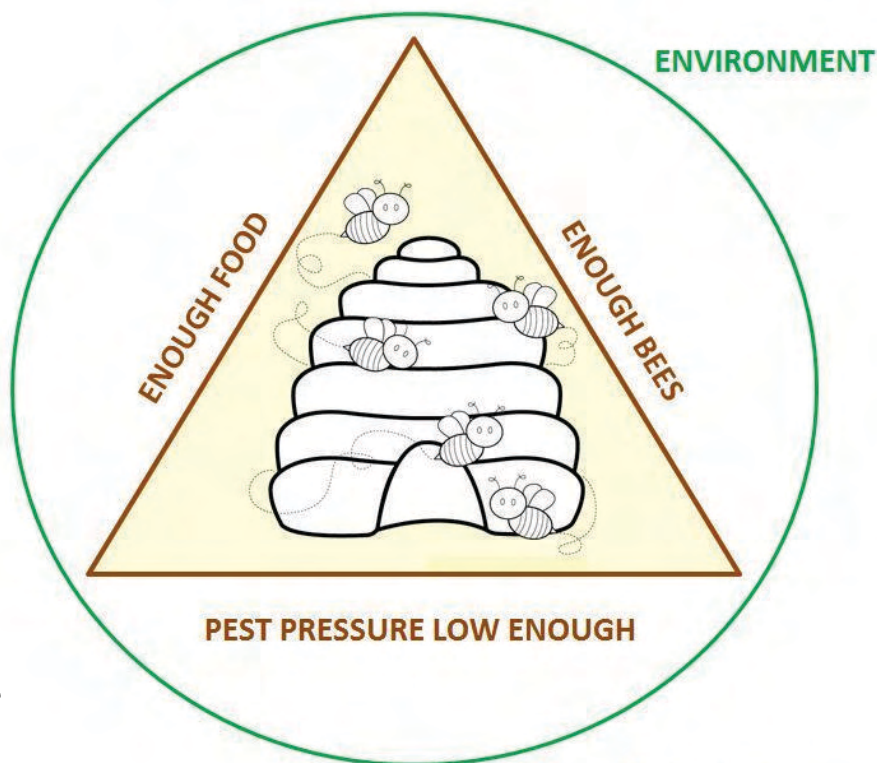
Remember that other than varroa, strong colonies don't need a whole lot of help fighting pests, if at all. If you notice more bugs than you are used to, or see signs of viruses, consider the colony's health to be compromised and do your due diligence. If your interventions do not seem to work, then something is off balance with the superorganism. Ask for help before the cold weather settles in, so you may rectify the problem before it's too late. There are solutions to most beekeeper dilemmas if we catch them on time, and miracles do happen occasionally. <smiles>

The most marvelous of things about honey bees is that they are incredibly resilient and adaptable. That is why

they are one of the oldest living bee-ings on earth with millions of years of evolution. In our modern age, they reliably make up for our shortcomings in knowledge and our mistakes, while we further our understanding of them. Remember the survivability triad? It bears repeating because this is what we hope to achieve with everything we do in beekeeping. All we really need to focus on is to help the bees achieve that healthy balance. Consult the fall 2023 issue of the Bee Buzz for more details on the triad.

Whether you are a commercial beekeeper or a backyard enthusiast, achieving this balance is the secret to a strong, long-living superorganism that keeps on pollinating and producing honey year after year. Fall is your last opportunity to address any issues before the bees cluster tightly in their effort to survive the arguably toughest part of their yearly cycle. Mother Nature will take care of the rest and kick things in gear again, come winter solstice at 4:20am, on December 21st. It will signal honey bee colonies that it is time for Queens to think about laying again...

WINTER SURVIVABILITY TRIAD



Copyright Dr. Josée Bourget

HONEY & THE HIVE



LOCAL HONEY
BEEKEEPING SUPPLIES
GIFT SHOP
CLASSES & MORE

828-484-9466
23 Merrimon Ave,
Weaverville, NC

honeyandthehivenc.com



GOOD BEEKEEPING STARTS WITH GOOD EQUIPMENT

PROUD TO BE LOCALLY MADE



MIDNIGHT
BEE
SUPPLY

Your one stop shop for beekeeping essentials and accessories
120 E Maple St Vass, NC 28394
(910) 245-3188
midnightbeesupply.com



Master Beekeeper Program

by Eric Talley MBP Coordinator



Some changes have been made to

portions of the Master Beekeeper Program (MBP), to motivate, better educate and get beekeepers involved in the Program.

A new award available to chapters of the North Carolina State Beekeepers Association.

The Master Beekeeper Program Chapter of Distinction Award will recognize annually, three chapters of the NCSBA that are doing a fantastic job of educating and mentoring, not only new beekeepers but intermediate-level beekeepers that are working to advance in the MBP. The criteria have been developed to recognize Chapters that are active in the MBP, to raise the status and awareness of the MBP, and to motivate Chapters to follow through with the practical exam for the Certified level to have beekeepers advance in the MBP.

All chapters of NCSBA are encouraged to keep documentation and submit the required paperwork to compete for the Award. The award period will start on 1 June and end on 31 May of the following year. Awards will be presented at the NCSBA Summer Conference during the awards ceremony.

There are three areas in which points are awarded:

- Certified level instruction, to include the practical exam for Certification
- Advanced level instruction, to include members testing and advancing in the program
- Public Service and Chapter Assistance

The NCSBA MBP Chapter of Distinction Application and Summary of Activities forms can be found at <https://www.ncbeekeepers.org/programs/mbp>.

Updates to the Certified practical exam.

I don't believe the Certified practical exam has been changed or updated since Dr. Ambrose created the MBP in 1982. At the time, there were no questions concerning the varroa mite. The Certified practical exam has recently been updated to include items related to varroa mites. In the final section - Miscellaneous Questions - you will find:

- Explain the process from start to finish, what actions you would take to complete a varroa mite count on this colony.
- What action would you take based on the findings of the mite count?

The sub-specialties for Master and Master Craftsman beekeeper have been updated as well.

What had been the first five listed sub-specialties, were combined and expounded upon to create ten areas that beekeepers can demonstrate active community involvement by winning 1st or 2nd Place ribbons at authorized competitions. The ten areas are:

- 1) Liquid Extracted Honey
- 2) Comb, Cut-comb or Chunk Honey
- 3) Crystallized (Spun or Creamed) Honey
- 4) Beeswax (Your beeswax entry may include either processed beeswax or beeswax figures/candles)
- 5) Mead & Beverages
- 6) Cosmetics, Lotions & Potions
- 7) Cooking with Honey (Food Classes)
- 8) Photography & Paintings
- 9) Artwork & Crafts
- 10) Any sanctioned competition class that does not fit in one of the above.

There is a new item that has been added as a sub-specialty as well:

Participate as a Judge, Secretary or Steward in four honey competitions.

Be involved as a honey judge, secretary or steward in four separate honey competitions. Events would include, but are not limited to, county fairs, a local honey show such as the Granville County Bee Jubilee, the Tobacco Road Honey Classic sponsored by the Orange and Durham County Beekeepers Associations, and the NCSBA Summer Conference honey show. One event must be the NCSBA Summer Conference honey show. We recommend contacting the MBP Coordinator with any questions concerning an event qualification.

Remember that “The local chapters of the NCSBA are the backbone for teaching and mentoring, offering guidance, encouragement and camaraderie through beginning and advanced beekeeping courses. The purpose of the NCSBA Master Beekeeper Program is, and always has been, to educate beekeepers and the general public.”

Better educated beekeepers keep healthier bees and are better able to teach and mentor new beekeepers so as to keep their bees healthy as well!!

Stay safe and healthy. I hope to see more of you at the NCSBA/SCSBA joint meeting next March in Monroe.

Summary of Master Beekeeper Program Chapter of Distinction Activities and Points 2025

GAP ITEM	Section A - Certified Level Instruction	Possible Points	Points Claimed
B2	The chapter (not local community college or Extension Office) held a certified level beginner beekeeper course that consisted of at least 14 hours of in-person classroom instruction. (attach syllabus and class roster)	50	
E2	Scheduled and administered the certified level written exam for new beekeepers. (attach schedule and roster for written exam)	50	
B3	Percentage of this years beginner beekeeper course attendees that completed the practical exam for certification after at least 2 months of experience working bees. (Percentage equals points)	Up to 100%	
B3 Bonus	Prior years beginner beekeeper course attendees that completed the practical exam for certification this year. (attach schedule and roster for that beginner course)	5 each	
B1	Number of chapter members that have mentored one or more new beekeepers for 10 hours or more. Points awarded for number of mentors and then points for number of beekeepers that were mentored. (attach mentoring program outlines and mentoring schedule) (10 points per mentor, 10 points per person mentored)	10 each	

GAP ITEM	Section B - Advanced Level Instruction	Possible Points	Points Claimed
B2	The chapter held an Advanced level course (Journeyman Prep) that prepares beekeepers for the journeyman or master beekeeper exams. Consisted of at least 8 hours of classroom instruction. (attach syllabus)	100	
E3	Number of chapter members that attended an advanced level training in preparation to take the journeyman or master beekeeper test. NCSU intermediate Bees Academy qualifies. (provide names of members)	10 each	
E1	Number of chapter members who advanced to journeyman or master beekeeper level after testing at the Spring or Summer conference or a special testing event. (provide names of members)	20 each	

GAP ITEM	Section C - Public Service and Chapter Assistance	Possible Points	Points Claimed
C1A	Number of public service events, educational venues the chapter members were involved in. (provide documentation) Chapter member must be a Certified Beekeeper of higher to get points. Maximum of two credits per each member of the chapter.	5 each	
C1B	Number of chapter members who presented programs at other chapter's monthly meetings. (provide documentation) Maximum of two credits per each member of the chapter.	10 each	
E4	Number of chapter members who taught at another chapter's beginner or advanced beekeeper level course. (provide documentation) Maximum of two credits per each member of the chapter.	10 each	

Beez Needz



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,
PACKAGE BEES & NUC'S

Beez Needz

FAMILY OWNED
AND OPERATED

3662 Edgar Road | Sophia, NC 27350 | 336.431.2339
beezneedz.com | facebook.com/beezneedz/

Wolfpack's Waggle: BeeMORE 2024: PROJECTS FROM THE OBVIOUS TO THE OBSCURE

by Dr. David Tarpy NC State Extension Apiculturist



One of the many hats that I wear at NC State is that of a teacher; after all, teaching is ultimately the primary reason of why universities exist. Sometimes this mission overlaps with our other missions of research and extension. Since 2018 (with a hiatus in 2020 because of COVID), we have been funded by the USDA to conduct student-research training called Bees and Microbes in Organized undergraduate Research Experiences (BeeMORE). Each summer, we invite students from outside NC State to come to campus for nine weeks to conduct some sort of research at the intersection between bees and microbes. We define this broadly, so not just honey bees but other bees as well (such as bumble bees, carpenter bees, solitary native bees) and not just pathogenic microbes like viruses and AFB but also beneficial ones (like those that live in their guts).

I'm always amazed at the breadth of research topics, the hard work by the students, and the positive career-building experiences that they receive. Every year we also include a trip to a local beekeeping club to present 3-minute "lightning talks" about their respective projects so they can translate how their research impacts our community. This summer, because it was so close to the NC State campus, the BeeMORE students gave their presentations at the NCSBA summer conference in Pinehurst, which was an amazing experience for them. Here I'd like to highlight just three of the projects in which our lab has been involved, which range from the straightforward to the somewhat bizarre.



Eva Corall, University of Colorado:

Eva has been working with Brad Metz in our program

to determine how viral infection affects drones and specifically their sperm. Based on our previous work, we have two hypotheses: (1) infection stresses the drones making them weaker and therefore they produce "fragile sperm," or (2) infection heightens the immune system of the drones making them more robust and therefore they produce "resilient sperm." Eva injected drones with Deformed Wing Virus (DWV), dissected their seminal vesicles after four days, then subject their sperm to a second stressor (heat) to determine if they are more fragile or resilient compared to un-injected or sham-injected control drones. Eva's results suggest the latter—infected drones had more resilient sperm when heat-stressed, showing that they are "protecting" their sperm when diseased. Now this doesn't imply that viral infection is a good thing, but that the bees have some unexpected ways to cope with it.



Tejal Bhor, Virginia Commonwealth University:

Tejal has been working with Yosef Hamba Tola in our program on the beneficial gut microbes in honey bees. These "good" microbes help keep bees healthy, but sometimes they can get sick from viruses. Viruses of bacteria are called 'phage,' and those that incorporate themselves into the DNA of its host (like HIV does in humans) are called 'prophage.' Her project has been to scour the published genetic databases of known "good" bacteria to see how many prophage they have, what these prophage do, and how they might interact with each other. We may be able to determine ways to enhance the bees' probiotics, making them more tolerant of other stressors. This project is a great example of just how far down you can drill in understanding the specific details in bee biology that

could have big implications for bee health.



Claire Green, Mississippi State University:

Claire has been working with Dr. Claire Gordy at NC State, but we have also been involved in this project by facilitating sample collection for them. The samples in question are not bees but bee pests, specifically wax moths (or at least their larvae). Previous research has shown that wax moth larvae, or waxworms, can consume and digest polyurethane (a type of plastic). The

two Claires want to determine exactly how they do this! Is it something specific about the genetics of the waxworms themselves (in which case genetic testing might reveal the important metabolic pathways), or might it be a microbe in their salivary glands or gut that help them break down the plastic (in which case isolating and growing those microbes might be possible). Just imagine, all the plastic pollution in our environment might disappear by microbes poised to eat it all. Anyone interested in sending in waxworms to help with this project, please visit go.ncsu.edu/waxworms to request a sampling kit!

While the BeeMORE program is really aimed at giving an intense and stimulating training in research, it also helps to demonstrate some of the out-of-the-box projects that might lead to unexpected benefits for bees and beekeepers. After all, this is how research helps us move forward, as well as foster the next generation of bee researchers.



scan for website



Plants, products and gifts! Your one-stop garden shop for bees, beekeeping supplies and more!



1421 Old Apex Road, Cary, NC 27513



www.gardensupplyco.com
@gardensupplyco





Bees and BBQ

Adventures in Urban Beekeeping

by John Kasprak NC Journeyman Beekeeper

I can't believe I'm going on my ninth season of keeping bees. I'm sure each of us has their own story of what path led us to becoming a beekeeper. But how does a person born, raised and living in the city get on that path, and what is unique about being a beekeeper in the city? Let's find out.

Growing up in Chicago I didn't study or take much interest in insects or bees. During a full career in the Air Force and it still was something far from thoughts. But 10 years ago, my wife, son and I were visiting the NC Zoo and we walked through the Honey Bee Garden. The volunteer beekeeper there asked if I saw the queen. That trip to the NC Zoo and the Honey Bee Garden changed my future. I went home, started reading about bees and beekeeping, and after discussing it with my family it was settled. I built two hives that fall and went to bee school that winter. In the spring of 2016, we installed two packages in our hives in the backyard and I became a beekeeper! If you have a chance to volunteer at the NC Zoo, I can highly recommend it. You'll definitely make someone's visit more pleasurable and might be a life changer as well.



John and Isaac at NC Zoo

What's the deal about being an urban beekeeper? Beekeeping in the city is still basic beekeeping, but there are some slightly different challenges. Hive placement, water sources, flight paths, and bee temperaments must be carefully considered and may not always be optimal. And education of the neighbors is also very important.

First, the placement of the hives. All the literature on basic beekeeping will state that the ideal spot is a sunny location with the entrance facing east or southeast. Well, in our situation that would put the hives right on the back patio. Great for the bees and even I would have loved that. However, our family and friends may not be so keen on coming over for a swim or a burger. So, we compromised, and the hives are at the rear of the yard in part shade, but the entrance is facing southeast. It works but requires being vigilant for some pests like small hive beetles.



Our small backyard apiary

Another consideration is the flight path. We prefer the bees to fly over our heads rather than buzzing across the yard strafing guests. So, our privacy fence was altered to accommodate this. We moved a section of the fence, so the hives are behind the fence in one corner. The bees leave the hive and fly out at a 45-degree angle out of the yard. This is very effective and eliminates us or the neighbors getting constantly buzzed. It also hides the hives. In fact, most guests don't even realize we have hives in the yard until orientation flights put a lot of bees in the air.

Providing an appropriate water source is yet another challenge. The bees sure love our pool and although it's preferable to the neighbors' pool we really prefer the bees to drink elsewhere. So, each spring when they choose a favorite drinking location by the pool we work to "train" them to go to a dedicated bee watering hole. We do this with a bowl of chlorinated water and some Bee Quick bee repellent. The Bee Quick is sprayed on

the poolside location they have chosen, and a dish of clean water is set about a foot away. The bees are eventually driven to the dish and learn that this is a bee friendly watering spot. Then we gradually move this dish about a foot or so each day until it's where we want them. As long as we keep clean water there, the bees pretty much stick to that site.



Bees behind the fence buttoned up

Finally, there are the bees themselves. They must be as gentle in demeanor as possible, not for me, but for the sake of being a good neighbor. I expect to be stung ... I signed up to be stung. After all, I'm a beekeeper. But our neighbors didn't sign up for it. So, we don't tolerate bees that are overly defensive no matter how much honey they might produce. Colonies that are persistent

in stinging must be corrected as necessary. We leave all options on the table and have used them. We've replaced queens, split colonies down and even euthanized one super-hot hive. We didn't want to, but it was the only option we had at the time. We have a responsibility to keep our neighborhood safe.

And speaking of the neighborhood, we are always looking for ways to gain support for our bees from our neighbors. The best way to do this is to open up a conversation. We've found a jar of honey will get that conversation started. Once people know your bees made that sweet liquid a conversation about bees is unavoidable. And a little bee talk goes a long way to motivating change for the better. We've had neighbors plant pollinator gardens, stop using broadcast insecticides and even cancel the mosquito spraying. It makes us feel like ambassadors for the bees.

We love our bees and I look forward to many more years of enjoyment from beekeeping. Maybe one day I'll have some colonies on a plot in the country where I can split them to my heart's content. But until then I'll just keep on being an urban beekeeper like many others. I hope you enjoy your bees no matter where you keep them.

Photos provided by John Kasprak

CYPRESS HIVES

TRIAD



BEE SUPPLY

TRINITY, NC

(336)475-5137





An Internship with Triad Bee Supply

by Margot Manning

What do you get when you cross a professional chemist, a talented woodworker, and a devout family man? Apparently, an excellent woodworker and a cunning, honest business owner, at least in the case of Mr. John Pledger. I have been fortunate enough to intern with Mr. Pledger at Triad Bee Supply over the past few weeks with the support of my high school, Greensboro Day School.

I'm Margot, a graduating senior who chose to dip into the professional world by indulging her long-held curiosity about beekeeping. Having read *The Secret Life of Bees* by Sue Monk Kidd in Middle School, I've always wondered about the realities of beekeeping. Luckily for me, Mr. Pledger was the perfect man for the job. He's well-equipped to answer nearly every question you could have with patience and excitement. Here's just about everything I was fortunate enough to learn during my three-week internship at Triad Bee Supply.

I learned about Mr. Pledger from a beekeeper in the area who spoke very highly of him and his work. It was clear from this point on that Mr. Pledger has quite the reputation in the beekeeping world of the Triad, from articles to awards to simply positive reviews online. Despite my apprehension about working one-on-one with a stranger, from the very instant I visited and met my soon-to-be mentor, I realized there was nothing to worry about- Mr. Pledger and I instantly got along, swapping stories of whitewater kayaking and fond memories of Student Council.

I eagerly showed up for my first day on the job towards the end of April. Mr. Pledger introduced me to the bees immediately as well as the legendary "Big John", an integral part of Mr. Pledger's ("Little" or "Troublesome" John's) operations, assembling wax foundation up at the top of the hill and offering shameless commentary to everyone's enjoyment. We spent the day in the sweltering heat disassembling hives, taking them apart frame by frame, and inspecting the activity of the bees. I wasn't exactly sure what I should be looking for and much of Mr. Pledger's vocabulary was swimming in my mind as I tried, somewhat in vain, to categorize his terms and define their meaning. It was clear I had much to learn.



Margot working beehives

Mr. Pledger at no point shied away from putting me to work, having absolute confidence in my ability to figure it all out. I liked this approach a whole lot more than what teenage girls are typically afforded: a slow, gentle explanation of things and little opportunity to be left to our own devices. So, he had me helping customers on Day 2, learning as I went. Every customer who came in had questions, concerns, stories, updates, and explanations for Mr. Pledger, and whether it had anything to do with bees or not, he listened intently, responded thoughtfully, and offered the absolute best service possible. It was during these, often long-winded and jargon-filled, conversations that I was able to pick up the art of beekeeping most effectively. I was well aware of the privilege I had to be able to listen in on the advice and experience of someone with 44 years of experience in his field and I've done my best to listen engagedly and curiously, not letting myself get bogged down by what I did not know.

Mr. Pledger, as I mentioned, has 44 years of experience with bees. Not only is this experience favorable, but when combined with Mr. Pledger's openness to share with his willingness to learn, it's clear that he hasn't just mastered the art of bees, he's also mastered the art of people. This is wildly and undeniably advantageous

and rare for any business owner. From Day 1, Mr. Pledger made it clear to me that he intends to treat every customer- everybody- with respect and kindness.

Just about every customer that came into the shop, having heard that I was interning, shared with me that I had come to the right place, among other coined terms and inside jokes of beekeepers, including but not limited to: “Ask 12 beekeepers for their opinion, get 20 answers” or “Well I promised myself I would just have one hive... and you know how that ends!”.

One of the beekeeper’s struggles, as I’ve learned, is who to listen to and where to seek advice. There is an overwhelming amount of discord within the beekeeper’s sphere, from online disagreements over how to most effectively avoid pests like hive beetles or how to identify if bees are about to swarm. Despite this, I think it’s safe to say that the opinion of Mr. Pledger is renowned and trustworthy for a reason. He not only has decades of experience under his belt, he’s an active researcher, finding what works, why it works, and how to best duplicate that result for his customers. This leads to unique innovations.

With innovation at the core of Mr. Pledger’s business, it’s no surprise that many of his stand-out products are his very own invention. Take for example his 3D printed items which he designs and manufactures himself. One example of this is his identifiably neon green entrance gate, which stops pests at their source. He has accounted for exactly the amount of room bees need to fit comfortably, with a designed ledge, which hive beetles cannot crawl up and over, as well as knowing that while wax moths and other flying pests may be able to enter this gate, the guard bees will accumulate at the entrance and “spit them right back out”, as Mr. Pledger has explained to me. This 3D printed technology joins with his classic Cyprus gate system, a rectangular rod with a small opening that interlocks with the 8-frame and 10-frame boxes.



3D printed entrance gate

His inventive creativity also works to solve problems some beekeepers aren’t even aware that they’re having— like in the case of his solar-powered vent boxes. Most beekeepers probably don’t even know how much energy their bees are expending in the hotter months as they “fan” to keep the hive cool. This, Mr. Pledger realized, was a profound waste of time and energy, as he could manufacture something to artificially cool the hive and allow the bees to spend their energy making honey rather than fanning. He’s found, through trial and error, that when his solar-paneled vent boxes are placed atop his hives, honey production increases by 40 percent and brood increases by 20. This is a tremendous advantage and the results speak for themselves.



Solar powered ventilation boxes

This quality of new, innovative technology joined with classic, trust-worthy techniques is what makes Triad Bee Supply stand out. Mr. Pledger can identify shortcomings of old, reliable tools and problem solve ways to fix them. His unrivaled knowledge of his craft and his passion for helping others has left a profound impact on my professional outlook. While I may not immediately pursue his exact career path, I’ve learned a great deal about how to live a fulfilling and fruitful life. Also, Mr. Pledger has shown time and time again that his support is unwavering, like offering me this opportunity to have my first ever published piece of writing. I feel so fortunate to have had this opportunity and to have made friends with such an incredible mentor!

Photos provided by Margot Manning. Triad Bee Supply is located in Trinity, NC. Visit their website at <https://triadbeesupply.com> for more information.



Sam Coble recognized for his service at the NC Zoo

by: Phil Uptmor NCSBA Zoo Coordinator

2023 Volunteer of the Year:

Sam Coble's journey with the NC Zoo began nearly 11 years ago as a beekeeper volunteer. From the start, his passion for bees and education was evident. But his story didn't end there. Upon retiring, he broadened his horizons and his service, extending his volunteering efforts across North America and Africa. His dedication to the NC Zoo and its mission has grown stronger over the years.



Sam was presented a painting by an elephant at the NC Zoo

His commitment to learning is nothing short of inspiring. Sam takes advantage of educational opportunities by attending regular volunteer meetings, lunch and learning events and various training sessions offered throughout the year. You can often find him engaging with guests, answering their questions, and enriching their visit with his extensive knowledge. His efforts have not gone unnoticed; over the past few years, Sam has received special recognition, thanks to the glowing feedback from both guests and staff.

Beyond the Zoo, Sam travels to schools and community events, spreading awareness about honey bees. His efforts have inspired others to join our volunteer ranks.

What truly makes Sam stand out is his incredible willingness to step up and help whenever needed—no questions asked. He is "that volunteer" and he can always be counted on. His experience and leadership have made him a mentor and trainer for new volunteers, guiding them with patience and enthusiasm. He ensures that everyone feels welcome and prepared, taking the time to answer questions and offer support.

President's Volunteer Service Award Gold Level: In 2003, the President's Council on Service and Civic Participation founded the President's Volunteer Service Award to recognize the important role of volunteers in America. This is a prestigious award that honors individuals and groups who have demonstrated a sustained commitment to volunteer service over a period of 12 months. Individuals can receive awards at the bronze, silver, and gold levels and requirements are based on the age of the volunteer.

Adult volunteers qualify for the Gold Level Award by serving a minimum of 500 hours within a period of 12-months. During 2023, Sam not only met – but exceeded the requirement by volunteering 689 hours. Sam's example delivers a powerful message that encourages and inspires others!



A Bit of History:

Dr. John Ambrose introduces the North Carolina Master Beekeeper Program using the “Nectar Guides”

by: Doug Galloway NC Master Craftsman Beekeeper, EAS Historian



Dr. John Ambrose

Before the internet and cell phones, notice of new ideas, services and programs were disseminated via word of mouth or through newspapers and periodicals delivered by the USPS. Fortunately, beekeepers utilized their association with the N.C. Agricultural Extension Service, the NCSBA and local county bee clubs to remain abreast of current advancements in beekeeping processes, services, and challenges.

Going through the archives of the Eastern Apicultural Society (EAS), two copies of “Nectar Guides” were discovered. These are pamphlets edited by Dr. John Ambrose, past NC Extension Apiculturist and NCSU Professor of Entomology in the College of Agriculture and Life Sciences and distributed via USPS by the N.C. Agricultural Extension Service, USDA, and NCSU, Raleigh.

Both were donated to EAS by past EAS Vice Chairperson, Ann Harman, then living in MD. The first, Volume 4, No. 3, November 1982, set out the new, “N.C. Master Beekeeper Program”. The second, Volume 5, No.1, February 1983, is a follow up reporting on the progress the new program is making. The Program is sponsored by the N.C. Agricultural Extension, the NCSBA and its chapters who are scheduling both “Certified Beekeeper” and “Journeyman Beekeeper” short courses. These short courses are designed first to educate, but also to prepare beekeepers for the new N.C. Master Beekeeper Program exams.

What seems quite remarkable from today’s perspective, is the interconnectedness of all things beekeeping prior to the instant communications options we enjoy today.

In 1976, Dr. Roger Morse at Cornell University recognized the need to support beekeepers beyond what he as NY Extension Apiculturist had time to do. He formulated the idea of supporting, educating, and encouraging select NY area beekeepers to hone their craft, then submit to rigorous testing to become certified as Master Beekeepers. These Master Beekeepers were then directed to serve the beekeeping community by helping beekeepers further their

knowledge and skills. This was the inception of the first Master Beekeeping Program in the USA. A point of reference, Dr. Ambrose pursued his graduate studies at Cornell University, receiving his Ph.D. in 1975.

The first Master Beekeepers from Dr. Morse’s program were certified in 1978. Dr. Morse recognized the need for an expanded program, so to accomplish that, in 1981 he turned his program over to the Eastern Apicultural Society of North America. The first EAS Master Beekeepers were certified at Rutgers University, NJ in 1981. The EAS board of directors, not wanting to interfere with the educational programs that member states were already conducting, chose to format their Master Beekeeper Program, offered only once annually, solely as a certification process. This would leave the educational component of Dr. Morse’s program to the beekeeper’s state Extensions and Associations.

Dr. Ambrose’s “N.C. Master Beekeeper Program” is a 4-tiered educational effort which culminates in rigorous testing of candidates for them to be recognized at their respective levels of achievement. Contemporaries of Dr. Ambrose recognize his organizational format as the foundation for many of the beekeeping association Master Beekeeper certification programs available today.

In this case, the “Nectar Guides” served very effectively to carry the word to beekeepers around our state, making them aware of this new and beneficial program.

If you care to read the full content of the Nectar Guide, Vol. 4, No. 3, it can be found on the NCSBA website, click, About, History, “A History of NCSBA 1917-1997”, by James F. Green, JR. and John T. Ambrose, Page 83-88. <https://tinyurl.com/ncsba-history>

In addition to his tireless service to the beekeepers of North Carolina, Dr. Ambrose served as the Chairman of the EAS Master Beekeeper Certification Program from 1989 until 1995.



Beekeeping & Honey Bees - Our Business Since 1863

**AP23
Pollen
Substitute**

**AP23
FOR
HEALTHY
BEES!**

SMOKERS



M00926

M00927

M00928

M009281

6 5/8 PAINTED SUPER
C31501P

9 5/8 PAINTED HIVE BODY
C51101P

**20-FRAME
POWER EXTRACTOR**
M00446



dadant.com

• 51 S. SECOND STREET, HAMILTON IL 62341 • PHONE (217) 847-3324 • FAX (217) 847-3660 • TOLL FREE 1-888-922-1293 •
• CHICO, CA (877) 332-3268 • FRESNO, CA (877) 432-3268 • PARIS, TX (877) 632-3268 • SIOUX CITY, IA (877) 732-3268 •
• WATERTOWN, WI (877) 232-3268 • ALBION, MI (877) 932-3268 • WILLIAMSPORT, PA (877) 532-3268 •
• CHATHAM, VA (800) 220-8325 • FRANKFORT, KY (888) 932-3268 • HIGH SPRINGS, FL (877) 832-3268 •



Sometimes Research Is Meant To Raise Questions

by: Mark Case NC Master Beekeeper



As a science teacher and researcher, I love experiments. They are designed to answer questions and reveal natural world secrets. A good experiment should be designed to answer a single question by altering only one variable at a time. Unless of course, you don't follow the rules and you change everything!

Most experiments are designed to answer a question. Some experiments are designed to create questions. Yup, guess what this scientist did?

Last summer, this was my beekeeping regiment: Late March, just before the nectar flow, I found the queen in each of 22 colonies and placed her in a queen castle or nuc box with a frame of food. I let each colony requeen during the nectar flow. All but one colony requeened. I knew my best queen, introduced her to the colony that did not requeen, left her until the end of the flow, then took her out. Every colony had a new queen and a brood break.

Had a record honey harvest in 2023!

I checked for mites at the end of June and found 3-4 mites per hive. Treated with ½ dose of Formic Pro then rechecked in July and August. Late August, there were 3-4 per hive again, so I treated with Apiguard.

The mite load was good at Halloween. The hives had plenty of food and honey stores.

I placed an empty medium box on each hive for a shim. Then I tried something new that my dad told me he did: soaked a 10-pound bag of sugar in water for 5-10 minutes. Pulled it out and let it dry. Placed the hard bag of sugar on top of the frames (like a sugar brick) in the medium box.

I checked the sugar stores in November and December and did an OA sublimation on each hive on December 27. Mid-January, the sugar was getting low, so I added two 4-pound bags of hard sugar to each hive.

Checked the hives February 14, 2024. Every single hive is alive! Most of the sugar is gone. However, the clusters are some of the smallest clusters I have ever over-wintered. The queen is working like crazy- two to three full frames of capped brood in each hive.



Photo: Mark Case

Soaked and dried sugar bag winter feeders

Now the questions:

- What attributed to 100% survival rate of the colonies?
- Was the mite treatment the key for survival?
- Did the brood break attribute to the great honey harvest or to the mite control, or both?
- Did the feeding method contribute to the small colony cluster?
- Did this feeding method contribute to the survival?
- What if I only harvested half the queens each year? Do a requeening every other year?
- Would a sugar brick give better results than the sugar bag?
- Would allowing a larger build-up of mites before treatment give better results?
- Will the smaller colony sizes now prevent swarming and better honey production during the flow?

Research is about answering questions. But without the questions, it is hard to conduct an experiment. So, which one do I tackle first? Hmmm...



NCSBA Summer Conference 2024



Photos: Jennifer Welsh

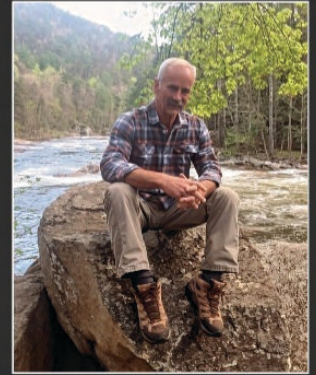


Paul L. Madern, Jr.

NCSBA Oldest Active Beekeeper

MCIVER-HAAS Lifetime Achievement Award

Rick Coor



Thomas Michael Batts



2024 Cooperative Extension
Agent of the Year



2024 Meritorious Service Award



Doug
VINSON

GAP AWARD



Onslow
COUNTY



Brandon Shannon

2024
John T. Ambrose Student Award

Congratulations

2024 NCSBA Master Beekeeper Awards

James Byle- Wake County Beekeepers

Lori Hawkins- Chatham County Beekeepers

Mark Case- Randolph County Beekeepers

Susan Warwick- New Hanover County Beekeepers

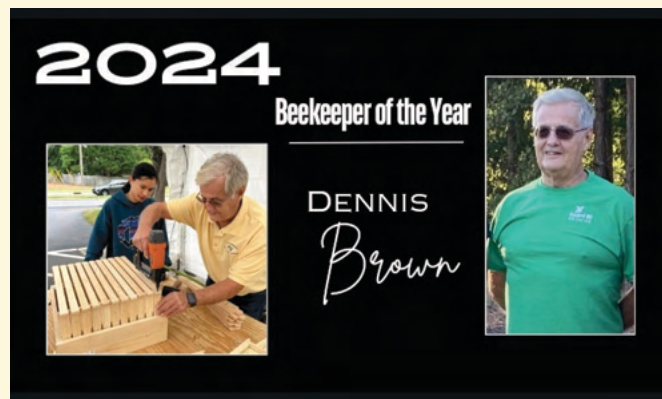
James Dove- Beekeepers of the Neuse

Gary Winebarger- Catawba Valley Beekeepers

Chris Hagwood- Wake County Beekeepers

Ryan Chamberlain- Orange County Beekeepers

Christina Henthorn- Granville County Beekeepers



Blue Ridge

Apiaries



5-frame

Nucs

828.394.7641

4 Generations of Beekeeping

blueridgeapiaries.com



North Carolina State Beekeepers Association
PO Box 99
Hurdle Mills, NC 27541

Non-Profit Org.
US POSTAGE
PAID
ABERDEEN, SD
PERMIT NO. 123

IT'S FAIR TIME!

Get your entries ready for the Bees and Honey competitions at state and local fairs! Agricultural fairs are a great way to show off your bees' hard-earned honey or that handmade bee craft, and maybe even take home a ribbon and a cash prize.

Please consider volunteering at the NCSBA honey sales booth or the NCDA&CS Information Booth at the state fair in Raleigh, or at one of the regional fairs. It's a lot of fun and a great way to share your passion about bees with the public.



North Carolina State Fair

October 17th– 27th Raleigh, NC
www.ncstatefair.org



**CAROLINA CLASSIC
FAIR**

Carolina Classic Fair

October 4th– 13th Winston-Salem, NC
<https://carolinaclassicfair.com>



N.C. Mountain State Fair

September 6th - 15th Fletcher, NC
<https://mountainstatefair.saffire.com>