"The amount of eccentricity in a society has generally been proportional to the amount of genius, mental vigor, and moral courage it contained. That so few now dare to be eccentric marks the chief danger of the time."

- John Stuart Mill

As I've meandered through my beekeeping journey, I have been privileged to get to know some interesting characters. Most, but not all, are generous, compassionate, highly intelligent people whose friendship I value greatly. One such person is Justin Maness, a NCSBA Journeyman Beekeeper who works as a full-time, professional beekeeper for Bee Downtown in Durham.

If you've ever met Justin, then you'll have to agree that he is definitely an "interesting character." For this month's musings, I decided to interview him to learn a bit about how one professional beekeeper goes about his business, how he came to be in this line of work and what nuggets of wisdom we may gain to help us all in our own bee-related efforts.

How and when did you become interested in beekeeping?

JM: The seed was planted back in college after I signed up for Dr. Tarpy's class, "Bees & Beekeeping." I was studying for my degree in Horticulture and I was immediately intrigued by the class. Now at the time I had no idea that it would lead me to become a full-time beekeeper. I was just any other student interested in the environment around us and how it worked. What I learned from Dr. Tarpy stuck with me. Shortly after I graduated I had the opportunity to join a honey bee research team studying the links of neonicotinoid pesticide use and bee mortality. This really ignited the fire. The team was growing quickly as well as our hive count and I had to learn fast how to manage large apiary yards, prep for study trials and how to transition management practices throughout the seasons. During this time I "caught the bug" and began my own backyard apiary focusing on honey production. I think a good indicator that you've fallen in love with your full-time job is when it becomes your side hobby!



Beekeeper Justin Maness spends much of his time on Durham rooftops. Photo courtesy of Justin Maness.

How did you come to work for Bee Downtown?

JM: I got to the point where I wanted to begin doing more outreach in the community and teaching others about our pollinators and beekeeping. During the winter of 2015, while looking for organizations that would offer that opportunity, I stumbled across the Bee Downtown website. I was so intrigued at the concept of urban beekeeping and how it was integrating hives and education in the community. It all started with a simple message sent from the "Contact Us" page. Leigh-Kathryn Bonner (founder of Bee Downtown) quickly replied and we began working on some side projects that included native pollinators and some market research. Not long after, in the spring of 2016, I joined the Bee Downtown team as Lead Beekeeper and we doubled in size from one to two team members!

What experiences and training prepared you for your current job?

JM: Well the experience I received while working at Eurofins Scientific Solutions really prepared me for the rapid growth we have experienced at Bee Downtown. When I started we were managing around 30 hives. Today we are running just north of 100. My experience running large apiaries, moving hives across state lines, making splits, catching swarms and monitoring Varroa mites really gave me the skill set to run a similar operation in the urban setting. That was extremely helpful but I can easily say that the skill sets in which I had no experience vastly outweighed the ones that I did have experience in. I quickly realized that in a small startup company you have to learn to be a jack of all trades for the business to be successful. Skills like marketing, sales, branding, communication, teaching, safety; all of these skills were required to make the engine continue to run smoothly. This I believe is one of the greatest opportunities that I experience; I am drawn out of my comfort zone and am provided the opportunity to learn more about myself. Things I liked doing, things I didn't like, things I'm not so good at and things I excelled

at. I think the most important lesson I have learned is to always be pushing yourself out of your comfort zone and learning new skills. You will thank yourself for it down the road.

What is "Bee Downtown" all about?

JM: Bee Downtown all came about as a response to the struggling honey bee population. Leigh-Kathryn Bonner, founder and 4th generation beekeeper, was determined to find a solution using urban areas. We concentrate on pulling together the business community for a common cause which includes social and environmental responsibility. When a business sponsors a hive with Bee Downtown they are not only contributing to the positive environmental impact a colony can bring to the area but the positive social impact we can achieve when using these colonies as a teaching tool in the community. What began as a way to increase the local honey bee population has really grown and developed as a way to educate the community about the importance of our pollinators. Through tours, events, and classroom education we can continue to raise awareness on topics such as sustainable agriculture, native and non-native pollinators and ways that the general community can help our pollinators, like planting nectar- and pollenrich plants that bloom through the seasons.

What is the Bee Downtown business model (how do bills get paid)?

JM: Bee Downtown is supported in a variety of ways. Many people don't know that we are a for-profit company and often people don't associate for-profit companies with having an environmental or social cause. We like to think that you can create change by following the triple bottom-line approach to business: People, Planet and Profit. Primarily we are supported through our colony sponsorships around the Triangle. We have been fortunate enough to create partnerships with companies like SAS, IBM, RTP and Capitol Broadcasting, just to name a few of the 50 companies that we are currently working with today.

We also have a non-profit called The Bee

Downtown Foundation. This Foundation allows Leigh and me to visit classrooms and clubs in the Triangle for free to offer extended education about our pollinators and sustainable agriculture. We donate a percentage of our profits from Bee Downtown to the Foundation annually. This along with grants and donations helps us continue the Foundation's work.

What is Bee Downtown's long-term vision?

JM: We hope to see this model extended across the U.S in all the major cities and eventually around the world. Right now we are working on expansion to Atlanta in the spring and from there we hope to expand to five more cities the following year. We believe that the more cities we can expand to, the larger impact we can make. Really we have had such amazing support from the community in the Triangle and we want to grow our reach and continue teaching more people, expanding the colonies we manage.



Want to have a lasting impact? Teach kids! Photo courtesy of Justin Maness.

How many people work at Bee Downtown?

JM: Right now we are running strong with two full-time team members, Leigh-Kathryn Bonner, founder and CEO, and me, Lead Beekeeper. That being said we cannot take all the credit for the explosive growth Bee Downtown has experienced! We have had a wonderful intern program with students from NCSU, Wake Tech, Duke and Davidson College who have contributed so much to our marketing and beekeeping team this past year. We also have a part-time member, Matt Dalhoff, who is a student at UNC-CH and is working on the operations side of the business. He is smart as a whip and juggling about 15 other things while helping us along the way. Finally we wouldn't have gotten to where we are without all the mentorship and advice we have received from the thriving startup community located here in Durham, specifically at the American Underground where our headquarters are. The resources offered through this community have really guided us in learning how to run a business of this magnitude.

What does a typical workday look like for you?

JM: This varies depending on the season as you can imagine. Winter being the slow season for beekeeping, this is when the behind-the-scenes work happens with sales pitches to new companies, making our operations more efficient, taking data collected through the year and using it to ask questions about how we can better manage in the next year. Really I concentrate on how to improve our program while creating more partnerships and doing research while trying to knock out my list of "things to do" that has been stacking up over the rest of the year.

During the spring, summer and fall I create a list of apiaries and actions that need to be taken at each hive that week. These hives are broken into days they will be visited, dependent upon location. We recently have begun using an application called Hive Tracks which I can't rave enough about. It is a wonderful application that



Bee Downtown's Leigh-Kathryn Bonner and Justin Maness. Photo courtesy of Justin Maness.

helps you store loads of data on each one of your hives. It allows you to set reminders on what needs to be done next to each hive and when it needs to be done. It is a very powerful tool for the beekeeper.

The magic really happens when I'm out beekeeping. The things I enjoy the most are waking up with the sun, going out and checking on the bees. One site requires climbing a two story ladder through a scuttle hold to visit a five hive apiary we have on a five-acre rooftop near downtown Raleigh. To access the ladder I have to walk through a glass-blowing studio (Glas) that makes neon signs. I get to chat with the artists and see their new pieces every time I visit. When I visit Capitol Broadcasting I get to walk through the halls and pass by David Crabtree every now and then on my way up to the bees! Other times I'm visiting one of our out-yards in an arboretum where I get to grab the four wheeler and ride around watching the trees in bloom. It's a truly amazing experience day to day.

What special challenges do you face working with Bee Downtown? How do you deal with them?

JM: We are fortunate that the regulations that we must follow when installing an apiary here in the Triangle are very friendly to beekeepers. Lots of people before us worked hard to ensure that beekeeping was a welcomed hobby in the Triangle and for that we are very thankful.

One of the topics which is top priority to our team is public safety. Before we install a hive or an apiary in the city, we always first do a walking tour of the property with the property owner to ensure we chose the best location for the health of the colony as well as the safety of people. We consider amount of sun, distance to high-traffic areas, ease of access, proper signage, securing the hive when unattended and the like. With our new community apiaries located at the NC Museum of Art and NCSU Centennial Campus we made sure to build a fence that would keep spectators at a safe distance while offering educational signage attached to the fence for visitors to learn more about Bee Downtown and our pollinators. What we want to accomplish here is to grab people's attention and cause them to ask questions about why hives are in urban areas and the positive impact they can have in our communities while also keeping everyone safe. We diligently requeen defensive colonies to always make sure that we have docile characteristics in each hive.

Another topic I hit on during presentations to bee clubs is a challenge that if approached properly can be an opportunity: swarms in the city. As we all know, a swarm is extremely docile due to the fact they have no home to defend. A lot of times you can have passersby who are startled by a ball of bees hanging off a tree limb or street sign. But when we get swarm calls in a populated area, we always take that opportunity to teach people who are interested. Often we put out cones to keep spectators back to a safe distance. We then hold general conversations and answer questions before and after we catch the swarm. I think if you take advantage of the opportunity in a safe way you can create a memory for those spectators and send them home with a little nugget of knowledge they may not have had before.

What can a regular hobby beekeeper learn from Bee Downtown's experiences?

JM: First I think the most important thing you can do is get out there and teach people! If

you have even the most basic knowledge in beekeeping or horticulture, you can teach. Don't be afraid to say,"I don't know." We can't know everything and knowing everything isn't a requirement to teach! You would be surprised what you learn once you do begin teaching.

But teaching in front of large groups of people may not come easy. I remember my first presentation in front of a bunch of preschoolers. I literally was sweating because I was so nervous, thinking I would say something dumb. I kept at it and now I can actually hold a room for a short period of time and offer the occasional laugh. It takes time and it's a skill you have to develop. Just do it!

One way to get plugged in is to reach out to your local bee association. Normally there are plenty of opportunities that the club has been

contacted about and it is a good way to get started.

The Bee Downtown Foundation has such a demand from local teachers in the area that we can't visit all the schools who ask. So we are always in need of more people to reach out to our local school system and teach kids the importance of pollinators.

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

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A contented beekeeper! Photo courtesy of Justin Maness.