

# Episode 134 Mixdown PROOFED

Wed, Mar 22, 2023 2:41PM • 39:08

## SUMMARY KEYWORDS

beekeeping, art, beekeepers, honey bee, queens, beeswax, bee, bees, honey bees, encaustic, question, people, colony, painting, karen, florida, podcast, produce, hive, european

## SPEAKERS

Questioner, Guest, Jamie, Amy, Serra Sowers, Stump The Chump

### Jamie 00:10

Welcome to Two Bees in a Podcast brought to you by the Honey Bee Research Extension Laboratory at the University of Florida's Institute of Food and Agricultural Sciences. It is our goal to advance the understanding of honey bees and beekeeping, grow the beekeeping community and improve the health of honey bees everywhere. In this podcast, you'll hear research updates, beekeeping management practices discussed and advice on beekeeping from our resident experts, beekeepers, scientists and other program guests. Join us for today's program. And thank you for listening to Two Bees in a Podcast.

### Amy 00:46

Hi, everyone, welcome to this segment of Two Bees in a Podcast. I'm really excited with this interview today because in the past with all of our episodes, Jamie, we've always kind of brought in honey bee researchers, we've reviewed peer reviewed publications, we've brought on scientists, but this year and kind of moving forward, we're hoping to interview more beekeepers, especially beekeepers who have made a living in the honey bee world. And so in the next couple of years, hopefully we'll bring in speakers and kind of highlight different ways that beekeepers have started to make a living and have a full time job in the honey bee industry. And so today, we're interviewing Karen Boger with Tri-Be out of Melrose, Florida. And Karen, I've known you for a couple of years now, and you've taught at our Bee College, and you sell beautiful art, and you've just done so much with honey bee art. So I'm really excited to talk to you about all of that today. Thanks so much for joining us.

### Guest 01:47

Great. A pleasure to be here. I'm honored. Thank you.

### Amy 01:50

So we love to let our listeners know about our speakers and a little bit of history as far as the honey bee world. And so how did you get started with honey bees? And so what's kind of your background and story with how you got into the beekeeping world?

### Guest 02:04

Well, my girlfriend was a beekeeper, and she decided that she wasn't going to keep bees anymore, and she wanted to give my son a hive. So we decided that the best thing to do was to go to the University of Florida Bee College. And so we started attending classes and learning about bees, and that's pretty much how it all started. And then we got the hive, and here we are now. But I want to add one little thing to that. During the course of our education, we met Michael Young and I took his encaustic class. And so the rest is kind of history after that. But yes, very fun and interesting way to start keeping bees, and we're still keeping bees and that's been over 10 years ago.

**Jamie 02:49**

So Karen, I really like that story. I mean, Michael Young is really cool guy, right? Like he's a beekeeper in Northern Ireland, he's a trained chef, he dabbles in beekeeping art as well and honey judging. So he gets to travel a lot, especially around the US, providing that training. And it's interesting to me that you kind of link your movement into bee art through Michael and the Bee College. That's exciting. And I love the fact that you started with bees first, and then you kind of expanded. So that's what I want to know. I want to know how -- you started with bees but I want to know what it was about that lecture from Michael, what it was about meeting him that helped you grow the little art business that you have, because you do so many types of things with bee art right now. So how did you -- was it a natural movement from beekeeping to art? How did you end up incorporating that into into your business?

**Guest 03:42**

Yeah, so it was a natural movement. What happened was I started making -- I had all these products from the hive, and I started making, like, honey and olive oil soap and my girlfriend came back to me and she said, "You should make felted soap." And I go, "What's that?" And she said, "Google it." So I googled it. And of course I looked at that and said, "I can do that." And so I started making the felted soap with the bee motifs on it. And of course, that expanded into all of the other felted art I do with the bee motifs. Now, the encaustics, I studied art at the University of Florida, and I was anxious to get back into that area because I retired from my regular job and I was so happy to be able to move into that area. And Michael inspired that option to take our beeswax, which I also do with candlemaking, and do something further with it. And I had never -- you're going to laugh -- I had never heard about encaustic painting. And I was just amazed because this was back in like 100 to 300 AD. Very, very old and the Greeks and Romans, this was a very common way that they painted. So I was so jazzed to find something that I could do with my bees and also with my art and it just kind of opened the door for everything.

**Amy 05:14**

You know what, Karen? I have never heard of the term felted soap before, I don't think, before you just said it.

**Guest 05:22**

Okay. You want me to dissect it?

**Amy 05:23**

Do you want to describe that a little bit? Yeah, absolutely.

**Guest 05:26**

I can. It's a brilliant idea. I did not think of it. I wish I had. But with your handmade soap, you want it to last as long as possible. Well, what I do is I wet felt the wool. And wool in itself is antifungal and antibacterial, so it never gets nasty. I always say it's very nice. But I felt it onto the soap. And then once it dries, I come back and I have a straight needle, and I put in the accents, and I love to do bees and flowers. So that's one of my favorite motifs. And the beautiful thing about felted soap is that it makes your handmade soap last way longer, because it's not going all over your shower. It's staying inside your wool. So it's just a really cool little thing. And I love it. I love making it. And each one is unique and a piece of art. So I tell people don't use the top part of the soap. Use the bottom. The top part can stay beautiful in your soap dish. You can only wash with one side at a time anyway. Use the bottom and it'll stay beautiful for a couple of months.

**Amy 06:34**

That is so neat. So you've brought up --

**Guest 06:37**

Isn't that neat?

**Amy 06:38**

That's so neat. I actually didn't know that. And so I feel kind of silly, just like learning all this on the podcast, Jamie.

**Guest 06:46**

Don't feel silly. Well, I'm glad you asked. And people always ask about it. And I'm happy to explain it because it's really kind of how I started into the felting side of my art.

**Amy 06:57**

So you've talked about felted soap, candles, you kind of touched on encaustic painting. What other types of art do you produce and what other types of honey bee art exists out there? I know there's so much but what do you do specifically?

**Guest 07:13**

I do a lot of skin products. I make it with my beeswax and/or my honey, depending on what I'm making, I use very -- I make very practical things, wood polish, leather polish. Those are all things I also do with the beeswax. And then, of course, the skin sabs are awesome. They're great for your skin and beeswax in itself, as you know, has natural sunscreen. So it's a really great product to put on your skin. My son makes a chapstick, and I also do a honey scrub, which is amazing. And I like that because I get to use my own honey with that, which is also really neat, and it's just amazing for your skin. So many great things from the bees. The other product I really have gotten interested in with my art is the eco printing, and that is a form of printing that I use flowers and leaves and fruit to imprint on either watercolor paper or silk. And after that, I go ahead and finish it off with some watercolor accents. And of course, what I love to say to people is the neatest thing about this art is it's all natural, and we wouldn't have any of this if we didn't have honey bees, or pollinators, let me say that too.

**Jamie 08:42**

So Karen, you produce all of these wonderful things. How do you market it, right? You're not just producing it to use it, you're producing it to put it in the hands of others. So how do you market your art? Is it farmer's markets, art shows, etc? How can our listeners who are interested in getting into beekeeping art offload some of these great pieces that they're producing?

**Guest 09:04**

Obviously, art shows and gallery shows, I utilize them as well. And then, of course, the bee conferences like yours, which is the University of Florida Bee College. But I do those in several different states, primarily like to do the bee conferences simply because most of the things that I'm interested in and do relate to bees. So I love to be hands on and see people and talk to them and be able to explain. I love explaining about how they can do encaustic painting. I love giving samples of my products and sharing how they're done. So that, for me, is the best way to market. I give out cards, obviously, with my information on it, and I get plenty of people that contact me directly either by text or email.

**Amy 09:58**

So you know what Karen, it's really funny. Before I started working at the honey bee lab, I attended Bee College here. And one of the classes I attended was yours. It was your encaustic painting class. And I realized very quickly that encaustic painting is not my specialty. So I thought it was a lot of fun taking your class and ever since, I mean, even before I've been at the honey bee lab, you've been involved with educating beekeepers about bee related art. So I know you do our candle classes and our encaustic painting classes. So can you just tell us a little bit more about just your work with training beekeepers, some of the classes that you've taught, and maybe just a piece of advice for someone as far as myself getting into classes and where I could go for more artistic classes?

**Guest 10:51**

Oh, okay, well, obviously, you can go online. That's a great avenue for all of us, especially just looking at what other artists are doing, besides the fact that the YouTube videos give us tons of information on how to do things, which I've learned a lot from myself. The encaustics especially, I would tell people that there's no not way to do something. There's so many different ways you can approach it. You're basically heating wax, but you don't always have to heat the wax, you can heat the tools, you can sculpt it, you can scratch it, you can paint it, you can draw it. The canvases are limitless. You can use wood, unbleached canvas, watercolor paper, photo paper, or encaustic board, just to name a few. And the other thing is you can do it with a hot plate, a heat gun, a torch, a griddle, I love the travel iron, that's what I love to use, because I can take it with me anyway. And a woodburner is another thing that you can actually use that works very well. And I think if I was going to give some advice, the first piece of information I would say is there's no mistakes. With encaustic painting, especially, if you don't like it, you can scrape it off, or you can add more wax to it, you can scratch into it. I mean, there's so many different things you can do. And you don't need to finish it right then. You can put it down and come back two or three weeks later and finish it at that point if you choose to. So it has a wonderful -- I think of all the art mediums, it's one of the coolest ones because it has so many different avenues you can take. The last thing I would say is learn your tools. Don't expect to do it the first time or the second time, you've got to learn your tool just like a carpenter has to learn his. And I think that's very important. And once you learn your tools, you'll be amazed at what you can do with beeswax. It's incredible. Does that answer your question?

**Amy** 12:56

Yes, ma'am.

**Guest** 12:57

Good. All right.

**Jamie** 12:59

So Karen, one of the things I appreciate a lot about you is you're not just kind of like a net producer of art and a net receiver of the benefit of that. You also pay it forward by teaching other folks about that. And as we've mentioned multiple times, kind of throughout this interview, you have offered training opportunities here at our own UF IFAS Bee College. But I want you to talk a little bit about that if you don't mind. Tell us a little bit about your work training other beekeepers because just before you do, I've got like zero art talent in my body. So if I wanted to branch my beekeeping endeavor out into some sort of art, I would need someone to teach me. So how do you -- tell us a little bit about how you work with beekeepers in that regard so that you can introduce them into the world of producing bee themed art.

**Guest** 13:49

Okay, well one of the things I love to do is show them a lot of the different types of encaustic painting that you can do. So that opens a huge door because a lot of people are intimidated because they say to me, "I can't draw." Okay, that doesn't matter. You don't need to draw. You can do amazing things with the wax without saying, "I'm drawing a bee," or, "I'm drawing a flower, I'm drawing a tree." You don't have to do any of that. So the first thing I love to show people is the cost and the ease of doing encaustic paintings. And I have a little tiny tool bag that includes everything I need to go anywhere and do an encaustic and that includes my travel iron, my encaustics, and my photo paper. So the other advantage to that, as with many art forms, and I love to talk about this because I'm also a potter, it cost me thousands of dollars to set up my pottery studio but you know what? It's under \$50 to get everything you need to do encaustic paintings. There's probably people that could do it for less than that. So I try to also focus on the affordability and the ease of being able to get set up and do encaustics. When I'm sharing the class with people, one of the things I love to do is let people go ahead and take the irons and the wax and sit down and play with it. I think that hands-on is one of the best ways to try it. And when people are saying, "Oh, my gosh, what should I do?" Well, one of the things if you really want to get into encaustics, and it's very simple, go out and collect leaves and flowers on your property, let them dry out, flatten them on a piece of paper, you can come back, and you can add the wax to those on a greeting card, on a photo card, any of those kinds of things, and add your wax and you've created an encaustic painting. And it's using a collage technique, but it's still encaustics. And it can get you started into how you may proceed further.

**Amy** 16:06

Well, Karen, I think I'm going to leave my office now to go pick up some flowers and leaves outside. And if Jamie asks what I'm doing, I'm going to tell him that I'm working.

**Jamie** 16:21

I won't tell him either, Amy.

**Amy** 16:24

Sounds good. Well, Karen, I am very excited. And I'm really glad that you were able to come on and talk to us today about your beekeeping arts and crafts. And I encourage our listeners to come take one of your classes. I'm going to sell Bee College a little bit, but I'd encourage our listeners to come visit us in Florida. We hold Bee College every March and August, and you're the go-to person that teaches a lot of our art classes that we have here at our Bee Colleges at the University of Florida. So thank you so much for that. And I just wanted to ask, is there anything else that you wanted to share with our listeners before we end today?

**Guest** 17:04

To be open to trying new things. You're a beekeeper. I mean, to me, you've already stepped out there and are willing to try something different and unique in itself. And so this is just another part and an artsy part of beekeeping. And I can't say how much I love what I do. I love what I do. And I'm so grateful that I lived here and I had the opportunity to go to the University of Florida Bee College. I always encourage people to do that, because it's a whole new world, and it's certainly one that we need to explore as individuals. So I want to thank you guys for allowing me the opportunity to do what I do. And I'd just like to say hello to Adam Strickland. He was the young man I sent to you. And of course, you guys were great with him, and I really appreciate that.

**Amy** 18:02

All right, Karen, thank you. Thank you so much for being on our podcast today.

**Guest** 18:07

All right, you guys, we appreciate you, and I will see you in March.

**Amy** 18:10

We'll see you in March. Thank you. Bye.

**Guest** 18:14

Thank you

**Amy** 18:27

Jamie, we did not pay Karen to say all that stuff, I don't think. Did you pay her to say that stuff?

**Jamie** 18:33

No, there was a lot of nice UF shoutouts there. So we're happy about that.

**Amy** 18:38

She's basically your success story from Bee College. I can't believe she started at Bee College, and just kind of went into the whole art world.

**Jamie** 18:46

Yeah it's amazing. As you said, I love the fact that she kind of got introduced to it through Michael Young because if you're listening out there, folks around the world, he's just, he's a really nice guy. He does a lot for beekeeping and bee training, and it just has been very instrumental, at least here in the US on training beekeepers about all kinds of things, art, culinary skills with beekeeping related stuff, as

well as, of course, honey judging is what he's known for. But it's neat that he introduced Karen and Karen really took off running with this particular hobby or craft.

**Amy 19:17**

Yeah, she said that was what? Over 10 years ago. And so she's been in the industry doing art, and selling art and teaching art. And so I think that's really, really fun. So something that we were discussing, she talked about the felted soap, she talked about candles, we really got into encaustic painting, which I think is very near and dear to her but there are so many other pieces of art as well that are related to honey bees. So I just wanted to kind of maybe discuss back and forth on the other things out there that are honey bee art related.

**Jamie 19:52**

I mean, I think this is really important, right? We're talking about ways that beekeepers can make money through beekeeping, and the very first thing we're highlighting is art. And Karen talked a little bit about the things that she does from an artistic perspective, but you're spot on. There's so much more, even still, to beekeeping art. /there's photographs, there's paintings, there's sculptures, there's all of the sewing arts, crocheting, knitting, all of these kinds of things that kind of often feature bees. There's sculpting, there's stained glass work that includes beekeeping or beekeeping themed art. And I've seen it all. I mean, we have at our UF IFAS Bee College, we have an art category in our honey show, other honey shows around the world have art categories, and you honestly never know what you're going to see. I've seen 3-D stained glass sculpting with bees. And so the point is maybe encaustic beeswax painting is not your thing. Maybe photographs is not your thing. Maybe knitting is not your thing. But there's a little bit of artist in all of us. And all of us have an opportunity to move our beekeeping hobby into an art perspective in a way that, in fact, might actually even add to some of the income that we receive by keeping bees.

**Amy 21:08**

Yeah, absolutely. Just like you mentioned, I feel like people are so creative when it comes to these things. I mean, you'll go and you'll think that you're just going to go see a photo, or maybe some jewelry, but then you, I don't know, you just kind of see the creativity that obviously, I mean, maybe I don't have that creative side even though I try to pretend like I do, but it's just really amazing to see everything that people have come up with.

**Jamie 21:34**

Yeah, I think one of the best ways to figure out what are different ways that folks incorporate bees and beekeeping into art is just go to a honey show and look at the art category. You just mentioned jewelry. I hadn't even thought about jewelry but bee themed jewelry is very popular. In fact, when you get into beekeeping, if you look closely enough, you'll see honey bees and beekeeping are absolutely everywhere. When I travel the world, one of my favorite places to visit are these ornate cathedrals and monasteries, stuff like that. Well, you'll often see bees, beekeeping in the stained glass windows, as an example. When you look at Egyptian hieroglyphics, you'll see honey bees and hives and Egyptians working beekeeping in hieroglyphics. It's just everywhere. And it's a really neat thing to do. One of my favorite current ways to see people kind of express themselves artistically with bees is there's a gentleman I know, a beekeeper, who will, on a canvas, create multiple layers of colored beeswax. So for example, he might put down red dyed beeswax, and then black dyed beeswax on top of that, and then blue dyed



beeswax on top of that, and then yellow dyed beeswax on top of that and create this kind of, this layered colors of beeswax. And then he cuts into the beeswax to the layer that he most wants to show, kind of the color layer that he wants to highlight. So what you end up getting is this kind of painting, this encaustic carved 3-D beeswax colored art.

**Amy** 23:05

That's so cool.

**Jamie** 23:05

That's just really neat. And so, just go to an art show that features bees or go to a honey show that has an art category, and you'll be blown away and might get some ideas. And as I've shared kind of early on, and we talked with Karen about, you can make money doing this. It's another good way to supplement your beekeeping enterprise.

**Amy** 23:25

Yeah, absolutely. And as you mentioned, typically when you go to any conference all around the world, there'll be a honey show, right? And so there are also honey judge trainings and honey judge programs around the world. And so it's just really fun and interesting to see all the different unique pieces everywhere.

**Stump The Chump** 23:46

It's everybody's favorite game show, Stump the Chump.

**Serra Sowers** 23:55

Welcome back to the Question and Answer segment, we hope you have enjoyed listening to all of the American Beekeeping Federation live Q&A sessions. Here is the last one. I will let our audience members take it away as Jamie and Amy answer their questions.

**Questioner** 24:14

First off, I'd like to say that I'm pretty new to beekeeping. I'm on my third year. I've got an opportunity to buy some queens, I guess still in a carcass where there'll be hatched out in a day or two, come about mid-February. My two questions are, one, is they're only like \$4 apiece, is it good to buy those in the middle of February? Will there be enough drones? And two, would it be okay if I take like, make a two frame nucs and put those new queen that are still in a little carcass there in that nuc? I live here in Middleburg, North Florida. So you know my weather type. I know you can't predict the weather. But those are the two questions that I have.

**Jamie** 24:58

So the first question is, is it okay get queens this time of year? Is it okay to make a split this time of year?

**Questioner** 25:03

Yes, basically in the middle of February.

**Jamie** 25:05



Alright. So it's funny because the question that I was going to ask him is, where's he from, because we'll start with two things now. So first of all, we're doing this podcast the first week of January in 2023. So, most bee or queen producers around the country are maybe some months away from being able to produce queens. In order to be able to produce queens, you got to have a couple of things going on. Number one, you've got to have a colony whose queen is laying eggs because it takes offspring to produce queens. Number two, you've got to have a colony that is invested in the production of drones, because drones have to be available to mate with those queens that are being produced. And for the vast majority of North America at this time of year, you're not going to have that situation. And it's certainly possible in some parts of southern Florida or maybe southwestern US that you can have this happen. So I'm not going to speak towards whether or not this particular breeder is able to accomplish that. However, he or she has queens available. If drones are available and offspring are available and grafting is possible this time of year, then in theory, you can get queens. I have known some breeders who will bank queens, that simply means they will have produced queens at a time of the year that producing queens is possible here in Florida. That might be all the way through October or early November. And then they would bank those in a colony so that they could, upon demand, take those queens out of the bank and mail them to someone. I don't know the particular situation that you're describing. But it's conceivably possible to get queens this time of year, although it has to be from a very specific area where they can be produced. Number two, what about making splits this kind of time of year? So very, very few of you are probably from Florida, right? Because this is the American Beekeeping Federation, so there's 50, or 49 other states, I was about to say 50 other states, there's 49 other states and lots of US territories and things like that. So the reason I'm saying this is a lot of you are going to hear this statement and kind of chuckle, but this is the cool time of year in Florida. And I know you're chuckling because you're like, "whatever, dude, it's like zero degrees at home, and we're under six feet of snow." But it is the cool time of year in Florida. So January and February are often difficult times to predict. So conceivably, if you've got a very strong colony, and you can make from it a very strong nuc, and you happen to have a fully mated queen from a breeder, conceivably you can make a nuc and put that queen in there and things be okay. I can't predict that there won't be a cold front that happens right after that. So you'll have to watch it closely, make sure it has enough food if it needs food. I will say, generally speaking, these types of beekeeper activities are done in early spring rather than kind of mid to late winter. But it is certainly conceivably possible that you could pull it off this time of year. Possible.

**Questioner 27:51**

Hi, my question is on EFB. I know I watched a podcast you did a long time ago on EFB. I had lost multiple hives last summer. I live in Colorado, I have about 10 that are going to make it through the winter. When will they get EFB again? Can I use the comb when I do that -- so I have a double deep, they make it, can I use the comb to make a split? Or is that comb still going to have the bacteria in it?

**Jamie 28:21**

So really, really good questions. Thank you so much about European foulbrood. So was that the last question? I didn't want to cut you off.

**Questioner 28:30**

And that follow-up question is should I prophylactically treat in the spring for EFB? And I have prescribed medication.

**Jamie 28:38**

Good. Yep. Alright. So there are two types of foulbrood that we struggle with in our colonies. I have to keep making sure that I'm on time. There's two types of foulbrood that our colonies struggle with. It's American foulbrood and European foulbrood, and they're caused by two different bacteria. American foulbrood is *Paenibacillus larvae* and European foulbrood is *Melissococcus plutonius*. And American foulbrood, I know you asked about EFB, wherever you went, but, oh, perfect. I'm going to deal with American foulbrood first. American foulbrood has a spore stage and a vegetative stage. And that vegetative stage, for ease of discussion, is what I call the active stage. So when American foulbrood gets into a colony, it gets into the brood, it kills the brood and anything that would reduce its populations or stress it, it can enter a spore phase. And the spore phase is remarkably resilient. So you can treat a colony for American foulbrood, and you will kill the vegetative stage but the spores will still be in the colony. So if your colonies are stressed three months, six months, eight months, two years later, 10 years later, conceivably, and you've got the spores present in a colony, the spores can, what I say, reanimate, and you've got an active American foulbrood infection all over again, which is why the recommendation with American foulbrood is if you get it you just burn the colonies because it's there, and it will always be there. I know that that's not popular amongst everybody. But that's kind of the strongest recommendation for dealing with American foulbrood. And I thought American foulbrood first, because European foulbrood is not similar in that context. It produces a spore type stage that is not nearly as resistant or resilient as American foulbrood is. So when you get European foulbrood, I think it's a reasonable recommendation, and I recognize speaking in front of an audience like this and speaking to all of our listeners on the podcast, I'm making kind of these sweeping claims, and I've got a huge spectrum of people from, "I will do whatever it takes to keep my bees alive," to, "I don't want to do anything, quote, unnatural." But I think when you have European foulbrood, it is the reasonable thing to do to treat with an antibiotic just try to solve that problem. That is my official take on it. I do recognize that there are other ways to handle European foulbrood, requeen, feed, try to hope that they push through it. A lot of colonies will push through it. But I will tell you, this is just an anecdotal Jamie experience to kind of get to your comments, when I first got to Florida, there were a lot of beekeepers who were kind of complaining about these mysterious brood deaths in late spring and early summer, the crud. And I realized that there's lots of manifestations of this and lots of things can cause it. But well, one of the most common things that we saw through all of this was European foulbrood in a lot of these colonies. And what's interesting to me about it is European foulbrood is not something that we teach much anymore, right? When's the last time you saw a talk on European foulbrood? We see them on Varroa. I mean, hey, we see them on just one way of treating Varroa, right? Right before us, just oxalic acid. So the reason I'm pointing this out is it was so not talked about that it's almost one of those things that beekeepers just overlook. They see your brood disease that screaming European foulbrood, but because we don't think about it and talk about it, we call it the crud or melting disease. So I think it's a bigger deal than what most people believe. And I think when we see it, it is certainly something that I wouldn't give a green light to recommending the treatment antibiotics. Your question was prophylactic treatment with antibiotics. And I'm not sure that the label of the available antibiotics permit prophylactic treatment. So all I can say to that, rather than speaking directly to it, is say, you've got to follow the labels of the products. I know that maybe one or two of the products allow it but one or two of them don't. So I think it's easier to say follow the label, and I don't think I would recommend treating, I would not recommend treating prophylactically. Now your question, your follow-up question is okay, I've had it, I treated in response to seeing it and it's going away, but I've got these boxes. Is it going to come

back later? And if you've really dealt with it, it should not come back later, at any higher percent chance rate than it would normally get infected with a disease on its own. But I will tell you, I have a colleague who sees this stuff predictably certain times of the year, and she talks about it a lot coming off of certain nectar flows. So I think EFB is a big deal, and we need to pay attention to it. They make these little neat tests that you can use to see if it's EFB. They're based on these Eliza tests, the same technology that you can use to determine if you're pregnant or not. And I think those are super useful to have in everybody's beekeeping boxes, to say, this is suspect, is it EFB? If it's EFB, then you take the steps necessary to deal with it.

**Amy 33:25**

Okay, so I've got a follow-up just real quick. I'm going to go a little past time because one, it's a break and two, we started a little late. And then we're going to take one last question after that. But my follow-up was going to be if you've opened the news today or seen anything about honey bees, there is a vaccine that has just been approved. Has anyone else had that question? Or anyone had that, or heard of it today? Alright. So if you open the news and just type in honey bee vaccine, there is a vaccine that was just approved. And so what I wanted to ask you about since we've started talking about foulbrood, Jamie, was can you kind of give us your take on, your thoughts on the vaccine? How is it going to work? How do you give a vaccine to a bee? Are they going to have to wear masks? Just wondering.

**Jamie 34:13**

I feel like the spotlights are on me and I'm at a microphone and I'm answering questions about vaccines for a pathogen that's spreading around.

**Amy 34:24**

What are you on your Facebook or something?

**Jamie 34:26**

What am I on Facebook, first of all, I don't have social media accounts. I like to live in the actual world. Sorry, did that sound mean? I didn't mean it to be mean, but it's just real. Now, the reason I'm giggling is because Amy texted me this morning because -- this is a cut out part of the night. I live just close enough to hear, about an hour and a half away, that it was really hard for me to divorce myself fully from my family. So I've had family responsibilities that I've had to go back and forth to. So last night I had to run home and watch my kids play a game. So I came back this morning and Amy texted me on the way this morning and said, "I think there might be a question about this, you should read it." So I come into the building, completely forget that Amy had texted me about this. And so when I get here, I just remembered that Amy texted me about this. I'm quickly trying to read what she texted me about this vaccine.

**Amy 35:19**

Let me tell you --

**Jamie 35:20**

So this stump won't be stumped.

**Amy 35:21**

I'll tell you what I what I was told. Okay, so the vendor is actually here, as in the trade show. And he said that the vaccine is going to be disseminated through the worker bees when they go to feed the queen, what's going to happen is that little piece of bacteria that's in the feed will go through the queen, and the idea, I guess, is that it would go through the egg and build immunity through her offspring.

**Jamie 35:51**

That's exactly what it says here.

**Amy 35:52**

Oh, my gosh. That's so crazy. It's almost like I know what's going on.

**Jamie 35:56**

One of the beauties about the podcast is we link stuff in the show notes. So while Amy was talking, I was like reading in real time going, "that's exactly what it says." So we'll make sure and link about this in the show notes, and you can actually hear about it more from someone, not me, who knows a bit more about it. But I've heard rumors that this was coming. And I'm aware of the idea and the technology about it. But it's so new that I cannot answer the question intelligently.

**Amy 36:22**

Maybe we should bring them on to interview them on the podcast.

**Jamie 36:25**

Sounds like a good podcast guest. Brilliant.

**Amy 36:29**

Yeah, we'll stump them instead. Let's see who this chump is.

**Questioner 36:33**

So my question is about like how often queens defensively sting. Like, one of my beekeeping mentors, he's been beekeeping 55 years and he's never gotten a sting from a queen, not even marking them or anything. So I'm just kind of curious about like, how often that actually happens outside the hive?

**Jamie 36:47**

Yes, I love this question, because any -- well, I won't ask that question because our listeners can't see you raise your hands. But there's some folks in here, I'm sure, who've been stung by a queen. Who's been stung by a queen?

**Amy 37:00**

Two people.

**Jamie 37:01**

No, I've been stung by a queen. This is me raising my hand.

**Amy 37:04**

Three people. Sorry.

**Jamie** 37:05

Okay, so that's a great question. So, queens sting queens, right? That's why they sting. Like, when they emerge from a cell, they'll go and kill their sisters, if multiple ones emerge from the cell, they'll sting one another. So they are certainly programmed to sting one another. I've never seen queens return stings when workers are attacking them. I've never seen that. So I'm wondering if it's just like one of these things that they purely do for defense. On the other hand, I have handled, physically picked up, thousands of queens. And I would bet, I'm not going to guess at the number of times I've picked up a queen, but I would guess in the thousands of times I've picked up a queen, I've been stung five times. So I do know they sting. And I don't know what I did different to elicit it. But I will say they will certainly sting when you grab them, but five out of thousands of times is how it's happened to me. Does it hurt more? No, I'm usually going, "wow, I'm getting stung by a queen. That's so cool!" And so that's usually what's happening when it's happening. So I like it when it happens because it's so uncommon. You should all go get your queen to sting you and make a comment about it in our social media accounts and we can go from there. Alright? Alright.

**Amy** 38:26

Alright. Thank you very much.

**Serra Sowers** 38:30

Thank you for listening to Two Bees in a Podcast. For more information and resources on today's episode, check out the Honey Bee Research Lab website at [UFhoneybee.com](http://UFhoneybee.com). If you have questions you want answered on air, email them to us at [honeybee@ifas.ufl.edu](mailto:honeybee@ifas.ufl.edu) or message us on social media at UF honey bee lab on Instagram, Facebook and Twitter. This episode was hosted by Jamie Ellis and Amy Vu. This podcast is produced and edited by Amy Vu and Serra Sowers. Thanks for listening and see you next week.