

# Episode 165\_mixdown PROOFED

Thu, May 16, 2024 2:50AM • 37:04

## SUMMARY KEYWORDS

bees, bee removal, beekeeping, pest control, honey bees, florida, strip, removals, beekeepers, jean, termites, work, structure, important, colony, structural, bee, pests, honey, liability

## SPEAKERS

Amy, Guest, Jamie, 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 00:49

Hi, everybody. Welcome to this segment of Two Bees in a Podcast. Today, we are joined by Jean Navarro who is the owner of Mega Bee Rescues and Pest Control. He's been a speaker at our Bee Colleges, he's attended our Bee Colleges, and what makes him so interesting is that he is a beekeeper, but he's also a pest control operator. We actually find that pretty often in our state in Florida. So, I'm excited to talk today with Jean about structural bee removals because that is something that many of our beekeepers and many of our pest control operators do in our state, but also beekeepers probably do this, or maybe they don't do it, around the world. But before we get into the structural bee removals, Jean, why don't you tell us about yourself and a little bit about your beekeeping experience?

### Guest 01:35

Definitely, Amy. Thank you all for having us here. So it's definitely a pleasure. My name is Jean Navarro here in Miami, Florida where we currently operate Mega Bee Rescues and Pest Control. I am a registered beekeeper with the state and also a pest control operator with the state of Florida. We manage currently, right now, over 150 beehives here in Florida. I have about four years of experience in beekeeping but about seven years of pest control. So I started doing pest control before I got into beekeeping. But I saw a norm in pest control that made me want to get into beekeeping and make an impact to the industry. And that's where I currently am right now, as we speak.

### Jamie 02:15

Jean, I think this is going to be a really interesting discussion to have because this is a beekeeping podcast, and most of our listeners are beekeepers, and they're going to be thinking, maybe, throughout

this whole discussion, "Well, gosh, why would you worry about honey bees from the pest control perspective? They're not pests, we love bees." So you conduct structural pest control in Florida, so could you elaborate on what this means? And maybe start from the well, honey bees are great, but sometimes they can be considered pests when they nest in areas where we don't want them. So could you tell us a little bit about structural pest control and this idea of honey bees sometimes being a pest in this context?

**Guest** 02:52

Definitely. When it comes to pests in any state or any region, it comes down to what they really are, and the thing about honey bees, although they are huge in agriculture and they're big pollinators, and they're essential to us, and the ecosystem, these are stinging insects, so it is seen as a public safety. So now, when it comes to pest control, pest control is trained and also advised to be on top of public safety issues. So now, when we conduct Structural Pest Control, we conduct pest control when it comes to structures such as commercial and residential buildings. In this case, that means that a lot of times we have to do an evaluation of the structure for us to then go and build an actual plan to fix any issues that they can have. That goes for honey bees, that goes for termites, that goes for rodents, that goes for many other insects. But we focus a lot on honey bees because honey bees build beehives in cavities, unfortunately, that end up inside of a structure at times. So it can be under a roof, it can be inside of a concrete block wall, in a shed, it can be in many locations in a structure that requires us to know exactly the structure that we're dealing with to provide the right solution for the end consumer. And at this point, since we are registered beekeepers, we're able to combine our pest control knowledge with our beekeeping knowledge that we then provide the relocation of the services when it comes to honey bees.

**Jamie** 04:14

So, Jean, maybe our listeners don't want to hear the whole backstory. But I've been at UF for about 17 years at this point, and this was quite a contentious issue for a number of years here in Florida. Hopefully, this discussion will be relevant to folks around the world but, for a while, only licensed pest control operators could perform bee removal services and most of those were eradication. Now, here in Florida, beekeepers can perform live removal services. So could you tell us a little bit about the difference between live removal versus eradication in the context of Structural Pest Control?

**Guest** 04:48

Definitely. When it comes to live removal, it has to be done by a registered beekeeper here in this state of Florida. It may be different in different states, but when it comes to live removal, it has to be done so that the bees are going to be transported for agricultural use versus eradication. Eradications are going to be done by a pest control operator. The bees are not going to be relocated. And at that point, it's either going to be that the beehive is removed, and unfortunately, the beehive from that is thrown away, or the beehive is going to be eradicated inside of the property by some sort of insecticide at that point. So those are the big differences between a live removal versus an eradication. Live removal is usually done for the agricultural use, and then the eradication aspect is done for actual public safety where the bees are just killed for the solution of them being, quote unquote, pests, at that point.

**Amy** 05:42

So Jean, you mentioned earlier, if bees are in the roof, or if they're behind a concrete wall, and all I can think about is just the liability. I know that you have employees as well, in your business. I'm sure Structural Pest Control has a lot of liability. Can you tell us a little bit about these liabilities with some of the risks that are associated with structural bee removals?

**Guest 06:03**

Definitely. When it comes to removing beehives of structures, or in properties, the liability is definitely high due to the fact that we are opening up walls, we are opening up roofs. So it's something that the liability and the risk factor when it comes to these type of jobs is high due to the fact that when it comes to opening properties, we're making damages. So it is important for us to be crystal clear for us to protect ourselves as an entity and as a company. That way, nothing can backfire. But at the same time, it is crucial for the communication and the right expectations with the documentation of what's going to get done. So it's important for that to be aware. And then, at the same time, for the person or the company that does this, for example, in our case, that we have the right coverages when it comes to liability, meaning that if we're going to open up a property, our insurance also knows what type of things that we do so that we are covered, which is important in reality. At the same time, when it comes to liability risks, we are going up onto roofs, we are stepping on tiles, we are going into a lot of different areas that are very sensitive that we have to make sure that we are covered for whatever reason, because accidents do happen. So that's why, for us, liability is a huge thing. And we want to stay on top of it rather than backwards work against it.

**Amy 07:23**

So I'm interested to know what kind of insurance you have.

**Guest 07:26**

Got it. So we have, for example, general liability insurance. At the same time, we have an umbrella coverage, which means that we are also covered for our automobile insurance. So those are the different type of coverages that we have. We also have workers comp for all of our employees if anything happened in any situation, when it comes to any accidents, any medical reasoning that they have to go and get checked out, that's covered when it comes to worker's comp. So we have general liability, commercial auto, we have an umbrella coverage in case anything happens under the two that I just mentioned, and then workers comp as well, with a set limit for all factors that can cover any accident and any property as well.

**Jamie 08:09**

I think some of what you've been discussing already is really relevant to this question I'm about to ask because the question is what should beekeepers consider before conducting your structural bee removal? And clearly, having liability insurance is one of those things, but there are some other things that they may consider before conducting one.

**Guest 08:26**

Definitely. Obviously, when it comes to beekeeping, beekeepers know bees. And I think that's the beauty about it. But when it comes to conducting a structural bee removal, it's a bit different due to the fact that the bees are going to work against you. What I mean by that, and it's really important for everyone to know, is that when you're working with bees, and you're moving a beehive, the bees are

gonna go towards the other direction. So if you're opening up a wall, and you're removing the actual beehive, the bees are gonna go to any cavity that's dark. And unfortunately, it can cause you to make extra openings if you're not on top of it. So that's one of the key things to understand is that it's not just as if you're going to keep bees in a bee box, you have to understand that the bees, at the end of the day, sense the threat and they're going to work against you on that note. And another thing that I would say, it's very important for the beekeepers to understand that when it comes to structural bee removals, it's a structure they're dealing with. So understanding and knowing the fundamentals of a structure such as construction, as well, is very important. It's very different opening up drywall versus a concrete block versus a wooden wall. All of those are going to require different tools, different equipment, different understanding and knowledge when it comes to opening up structures. So having the right training would be actually something that's very important just to even want to conduct a structure bee removal. That way they are protected when it comes to any liability and they're also making sure that the homeowner is getting the job done the first time, which is very important when it comes to this stuff.

**Amy 09:54**

So, Jean, I'm probably going to throw you under the bus here a little bit because you're my friend. I think I remember you talking at the college about one of your employees, and how he went out with a saw that was not appropriate for what he was cutting through, and you let him continue with that. Is that right? Just to let him learn his lesson? So do you want to talk about that real quick?

**Guest 10:14**

Yeah. Oh, man, Amy. So yes, in this case, I had an employee of ours, he's a great employee, great tech, he ended up doing the job, but he didn't have the right tools. And the thing is, I'm really big on communication. Oh, we should be. And he didn't take the right tools. He didn't communicate with us either. He didn't have the right things, and he was trying to open a durock wall, which is almost concrete, of a layer with a metal saw to cut wood, and just the teeth kept going out on him. And long story short, instead of that wall being opened in 20 minutes, it took him about 40 minutes. So it's just double the labor. But ever since that, he definitely made sure that he has the right equipment. But it comes back to me because I didn't check that he had the right equipment to begin with. So that's where the whole story kind of turns around. And although he learned his lesson, and now he knows he needs to have the right things on my end, too, I made sure that now I implement weekly checks of all the vehicles to make sure they have the right equipment, the right tools, and everything that they need to be set up for success, which is important for any job.

**Amy 11:14**

Yeah, definitely. Thanks for sharing that. So I know that you're very active on a national level, as well as pest control. You are always in Gainesville, in Florida continuing education. And I know that that is required for pest control operators in our state specifically. Can you talk a little bit about the continuing education that you do, or you have your team members do?

**Guest 11:37**

Definitely. So within the pest control requirements here in Florida, for example, we're required to have continuous education each year, depending on the categories that we are licensed for. In this case, in the state, we're licensed for three different pest control services, which are lawn and ornamental is one, termites, and then general pest control. So we're required to have a certain amount of hours each year

for us to be able to still renew our license each and every year. So what I do is I, myself, stay involved on a national scale by just traveling under the National Pest Management Association, which they're great because they're always great on just bringing very reputable and high-quality leaders in the industry and just kind of help us with training. And then on the other note, when it comes to the bees aspect, although it is not required on a state level, I always try to make sure that the team is always evolving when it comes to their knowledge. So Bee College is one of them, as I enjoy each and every year. I think Bee College is great because you always walk away with something. And on the other note, it's something that not only with Bee College, but whenever there is a conference related to bees here in the state, I like for the team to be part of it because they open their network. And they also open just their knowledge in regards to understanding more about what they do. And I feel like the more that you know about something, the more of a value that you can add and the better you feel working with it. So those are just things that we do on a very often basis. And I think training is crucial. So I do think that people out there should always invest in themselves because there's a large return on investing in continuous education when it comes to this stuff.

**Jamie 13:20**

Jean, I'm listening to you talk about all the stuff that you have to do and working with saws, and you work with stinging insects, and you work taking apart people's houses, you talk about continuing education, so all of that kind of swirls in my mind to lead me to ask, how important is safety training and implementation in your business?

**Guest 13:38**

Safety is huge when it comes to operating a business because not only do you have yourself to worry about but you have other individuals whose life depends on you. So for them to know how to set up a ladder, for them to know how to walk on a roof, all those details are very important. In our case, we have an onboarding training that we do when we hire someone that gives them the fundamentals on how to set up a ladder, how to walk on a roof, how to use certain equipments. That doesn't only end on the onboarding process. On a very quarterly basis, we do actually training with all of the tools that we use so everyone has a clear understanding because we're dealing with very heavy equipment, and, unfortunately, accidents can happen. And if accidents go the wrong way, it can cost a very, very large effect on the body. We're using a lot of different tools that open up walls. So it's important for the safety to be on top of. I will say that the safety training is important, and then just implementing consistent training to continue evolving is actually even more crucial when operating any sort of business.

**Amy 14:43**

So, Jean, some of our listeners on the podcast are probably starting to think maybe I should incorporate pest control or Structural Pest Control to my operations. And so my next and final question for you is, what are some final pieces of advice that you could give to anyone that is considering starting a structural Pest Control business?

**Guest 15:01**

Definitely, that's a great question. I would say, depending on what state or where they're located around the world, it's important to really understand the rules and regulations of that area. So every location, every country, every state differentiates on that matter of wanting to start and be a licensed pest control company. So I would say it's important for them to know what rules and regulations they have to abide

by. Based on that, they can then seek on starting. And something else that I would recommend as a piece of advice is never be afraid to ask and never be afraid to reach out to those that are already doing it. So what I mean by that, we've all, in every situation, have always wanting to start doing something, but we didn't know where to start. We've all been there. So it's okay to ask around, it's okay to reach out. At the end of the day, it would only help them and advance them on a very faster scale. So definitely understanding the rules and regulations, one, knowing what requirements are needed, such as any liability insurance, things of that nature, and then three, I would say, just ask and become friends with the people that are already doing what you do. They, a lot of times, understand where you're coming from. So they can definitely help you just advance what you're trying to accomplish. That's what I would say can definitely help a lot of people, and it's helped my business, and it's something that I have mentors today that helped me each and every day because it's important to have them.

**Jamie 16:28**

So, Jean, I'm going to ask you to step out of your business shoes and into your clients shoes. I mean, you've got customers who will reach out to you, and I'm sure, over the years of doing this business, you've been able to hear some of the critiques or some of the pros that they consider with regard to choosing bee removal specialists. So what are some pointers that you can give to the consumers who are trying to determine what to ask, how to choose a bee removal specialist?

**Amy 16:58**

Yeah, Jean, I think you said that really, really well. Thank you so much. Is there anything else that you wanted to share with our audience?

**Guest 16:58**

Definitely. And that's a great question, Jamie. When it comes to consumers, if I had to step out of the bee removal aspect and I was a consumer, I would definitely say it's important for them to know the level of education that the person that they're hiring has, as well as asking the right questions. How long they've been doing it, what is their process like, or how are they going to open up the wall? For example, are they just going to break it open? Or are they going to cut open? There's a big difference between breaking and cutting, which is important for them to understand. Two is, is there any warranty with the work that is being given? Is it just a one-time service? Or is there any warranty being provided? On another note, documentation. Is there a warranty in writing? Or is it just on a word-to-word basis, that in that case, they want to have something in that documentation, which is hugely important. At the same time, I will say to all consumers, it's important to do their background checks. When it comes to working with companies, Google reviews can be very helpful. Seeing where they stand, seeing their experiences with other customers is very important. And then at the same time, I want to say trust. They need to trust the person they're about to do business with. Because without trust, it's very hard for them to understand and really feel like they're about to be put in the right hands. So as long as the trust is there, that also has to do with communication. It's important. So all those pieces go into one decision, and are they going to move with that person or not? And if it's not a fit, and if there's one red flag for all those pieces, then I would definitely say hey, look around, because there are a lot of reputable individuals. There are a lot of reputable companies that have a passion, care about how they input their consumers first, and I think that's the important thing. Having the right core values for our business and understanding that the consumers comes first is important, not the business. So the consumers definitely our need. And we are there to provide that need for the consumer. It's always important to

keep that in mind. Definitely. I would say with all the audience that are listening, when it comes to starting a business, whether it's a bee removal, whether it's beekeeping, whether it's advancing their own business or their own knowledge, investing in themselves and continuing educating themselves on any sort of platform is important. And then at the same time, it's always great to continue working in the right direction that you want to work in and don't let anyone kind of hold you back. I think it's important for a lot of us to just want to do what we want to do as a business and as an individual when it comes to beekeeping. We got to keep that in mind, always. What we want comes also first and we have to make sure that when it comes to beekeeping, just keep moving forward. So definitely, that's something that's important just for everyone to know, and it's an honor being here as well.

**Amy** 19:46

Sounds good. We loved having you. Thank you so much for being on the podcast with us today, Jean.

**Guest** 19:50

Thank you for having me. I appreciate you, Amy, and thank you for what you guys do. It's always an honor. I look forward to seeing you guys again in Bee College.

**Amy** 19:56

Jamie, I always like talking to Jean. He's always just a light-hearted, very kind person, and so it's always good to hear from him and some of those experiences that he's had. But it's kind of funny because I'm thinking about, as he's speaking, I'm thinking about structural pest removals, and just bees in structures in general. And I think what's interesting about it is that we've got an international audience. I've heard that in some countries, people find it really good luck when they have bees their homes. But, of course, there's always the opposite. Bees in structures where they have comb, they've got honey, there's brood, and sometimes that does bring in other vermin. So what are your thoughts on that?

**Jamie** 20:44

Yeah, I mean, this is a tricky issue, right? Because we're all beekeepers, we love bees, we want them absolutely everywhere. That's good. But honey bees can be pests. And sometimes we have to remove ourselves from the let's love bees and just look at it for what it's worth. And first of all, at least in the US, it's somewhat unique, because honey bees are not native, right? So when they move into the feral population, they can show up where people or animals frequent, and that can be a problem. There's an added issue with Jean in that he's in Miami, which is where we have a relatively high density of feral colonies of African-derived honey bees or Africanized honey bees. So these bees can be quite defensive. They nest in so many places, water meter boxes, power poles, people's walls, just all of this stuff. So every year, we hear about people getting stung, we hear about heavy equipment operators getting stung. So honey bees can be a pest and a nuisance in the settings. And so that's why we have a whole industry built around bee removal. And in Florida, it's added uniqueness because you've got pest control operators who have the ability to remove them alive or eradicate them. And then you have beekeepers who only have the ability to remove them alive. And so it's further compounded depending on what angle that you take.

**Amy** 22:00

Yeah, definitely. And that's probably not the same in all states, especially in our country. It really would just depend on the rules and regulations, whether it is required to be a pest control operator to do structural removals. So not all states allow beekeepers, in general, to probably do structural removals, just because of the work and the safety, the liability, everything we talked about in that episode.

**Jamie 22:24**

Yeah, I mean, you're spot on. And I can give that example from here in Florida. And again, it may be relevant where some of our listeners are and maybe not where others are. But in Florida, at least, when I was hired, the sheer removal of a honey bee colony from someone else's something was considered pest control. So if beekeepers weren't performing, at the time, bee removals, they were practicing pest control, potentially, without a pest control license. And so that was a big deal in Florida for a while until the state made it possible for beekeepers to perform live removals. But if a beekeeper doing a live removal meets a colony that he or she is struggling with, maybe the bees are very defensive or whatever, and they apply something to kill those bees, now they're practicing pest control without a license again. And so what you are seeing is kind of the split. Beekeepers would be called to do live removals and pest control operators were being called to do eradications of these colonies. And I'm using Florida as an example because it provides a great example of where some states may actually consider bee removal to be pest control. And if that's the case, then you might need a license and liability insurance and business and all that stuff. And even outside the US, that may be the case. And I know probably a lot of states kind of turn a blind eye to beekeeper bee removal of colonies because it just kind of makes sense in their head and they don't want to rock the boat any. But in Florida, we got African-derived honey bees or Africanized honey bees, then it became a problem because not just everybody should be performing those removal services. They need specific training and making sure that there's a lot of safety involved. So I think the point of everything that I've just said in the question that you just asked is you really need to know your local areas' rules and regulations related to bee removal before you engage in the business of bee removal, especially when there's money exchanging hands for you providing that service.

**Amy 24:18**

Yeah, and the last thing I wanted to kind of bring up was just the amount of work it takes to do a structural removal. I mean, I would definitely recommend, if you're looking into doing that, intern with someone or gain the experience. Start small. It's so much work. I think about, especially in Florida and the climate that we have here and how hot it is, but just being on ladders, cutting through walls, cutting through concrete walls for that, and it seems like so much work. It's something that I probably personally won't get into. But, it does take a lot. I'm glad that their crew has continuing education and considers that as well.

**Jamie 24:54**

Yeah. Amy, it's a tremendous amount of work. Some people get into beekeeping because somebody had a bee colony in their tree or their wall and that person removed it. Well, new beekeepers become that person who their friends and neighbors and family ask, "Hey, we've got bees in our wall, come take them out," and you're like, "Oh, gosh, this is cool." So, they do it and it's fun. And you're like, "Oh gosh, I could do this for a business." And so because you feel like you know all the bee-related stuff regarding bee removals, you think, "Well, this is going to be an easy thing." But everything you just said, Amy, is true. Structural Pest Control is difficult. You have to take apart structures, and unless you've got



construction experience, are you taking apart the structure removing bees? Is part of your business plan to repair the structure? Can you repair the structure? Can you do drywall? Can you replace a wall? Can you open a concrete pillar that has bees in it and repair the concrete pillar? Can you remove shingles or other roofing structures to go in and get the bees and then return those things? And so it's not to be gone into lightly. Your advice, Amy, is 100% spot on. Before anyone should ever branch out into this as a business, it would really benefit them to work with someone, maybe even for a couple of years, who provides this service so that you can learn the industry, learn the regulations, learn the insurance responsibilities, learn all the ins and outs associated with taking things apart safely, removing bees safely, putting things back together safely. And just like you said, Amy, continuing education is crucial to making sure that your business is optimized, that you're providing a great service to customers, that everybody's safe, and that, ultimately, since it's a business that you're able to be profitable at the end of the day while providing the service that you're advertising.

### **Stump The Chump 26:46**

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

### **Amy 26:55**

Welcome back to the question and answer segment. Jamie, the first question we have, so someone has a bait system for termites that is applied to their home. The bees are about 20 feet or so from their home and they're wondering if they should move their hives when they get treatment? Is it okay for the baiting system to be there? Obviously, we don't want termites at our home. But we also don't want to do any damage to our honey bees. What are your thoughts on this?

### **Jamie 27:19**

Amy, I think this is perfectly safe in this context. So let me broaden it again a little bit for the readers. In the US, and probably elsewhere around the world, termites are significant problems for wooden structures. And in Florida, that's especially true because it's so humid here. It's so warm here. A lot of houses have that kind of wood infrastructure that termites just love. Love it, love it in Florida. So one of the ways that homeowners here control termites is they use these bait stations. So, Amy to the questioner's specific question, in this context, the bait is actually almost like a piece of wood that is buried in a plastic case in the ground where the termites are moving. And so the wood has a compound in it that kills the termites when they eat it and take it back to the nest with them. Since this piece of cellulose, wood-like material, is physically in the ground, bees can't even access it. So I would argue that this is probably one of the safest ways to treat homes for termites because the alternative is usually trenching, digging a ditch around the house and using gallons and gallons and gallons of formulated compound to control termites. So, I even have the bait system in my own house. And so the chances of bees getting exposed to it are almost miniscule. And if they did get exposed to it, it'd be in such low quantity, the likelihood that they would even want to interact with it in the first place is really, really low. So I think there's an incredibly low risk of this product to impact bees. So I don't think, in this particular context, it's a problem at all.

### **Amy 28:59**

I think that's great news. Okay, so the second question that we have -- actually, I feel like we've been asked this before, and I'm not sure if it was just me that I was asked, or maybe we asked on the podcast, but the person is asking about storing Apivar strips. It always seems like you have extras. I

would say, maybe you find a beekeeping friend and share a pack with them. But if you have extras, what do you do with them? And how do the strips work? I mean, once you open it up and you've got those strips, does it start releasing chemicals? At one point, does the strip not have any amitraz on it? Or how does that work?

**Jamie 29:15**

I love this question, because for the next few minutes, I can pretend to be a chemist.

**Amy 29:37**

Yes, we always need that moment.

**Jamie 29:39**

Every once in a while, I want to sound smart. Okay. So Apivar is essentially a plastic strip that has been impregnated with amitraz, which is the active ingredient. So Apivar would be, then, the formulated product, and the way that it would be built, the way it's constructed is when you hang those strips in the hive, there is a slow release. So it doesn't all come out of the strip at one time. And as bees walked past that strip, they pick up residues, the mites touch those residues, etc, and it kills the mites. Alright, if you look on the label of the package, it will tell you how long to leave strips in hives. Once you leave those strips in the hive for that length of time, you need to throw them away. They are no longer useful. What has happened in that case is that the product has been used to its full extent and the manufacturer is telling you that, as that product gets weaker and weaker and weaker, you are low dosing mites to that product, and therefore, you're increasing the chances that they can become resistant. Now, the questioner is not saying, what do I do with the used strips? The questioner is saying is, what do I do with the ones I don't use? But I really feel like I need to touch this use thing because this use thing is part of what created the resistance problem that we have around the world with Varroa to fluralinate and amitraz and things. So for example, some folks take the approach that if the package says, leave the strip in for 56 days, if I leave it in for 75 days, I'm gonna get better control. That's not the case. Once the strip passes the labelled time, you're in danger of creating resistant mites. So you would take those and throw them away. I've known beekeepers who will take those used strips, wrap them in aluminum foil, throw them in the freezer, and bring them out next spring to use them again. Do not do that. You're setting yourself up for trouble. Now, what if you've only got one colony? And the minimum size package that you can purchase is a 10-strip package? Well, you're only going to use two strips. So what do you do with the other eight? Well, the good news is the answer to that question is on the label. The label will have a box that says storage and disposal. It will tell you how to store unused product and how to dispose of the unused product. Why would you dispose of the unused product? Because every product comes with an expiration date. The package will have an expiration date on it. What is the expiration date? That is the manufacturer telling you that the effective life of the strip is over. Well, let's put all this together. If you have unused strips that do not exceed the expiration date, follow the label about storage. And if you store it the way the label tells you, then you can use the strips later as long as it's before the expiration date. If you have unused strips that are going to go past the expiration date, Amy, do exactly what you said. Give them to some beekeeper friends in a trade or throw them away. That's the correct thing to do with storage and use of these strips.

**Amy 32:54**

I would love our listeners to email me after they hear this episode because I would love to hear whether or not after you heard Jamie, if you're going to go and read the entire label on the strips. I feel like it's gonna be really fun, Jamie, to see, okay, yeah, who has actually taken and read every single word on the label? It's just a fun thing.

**Jamie 33:16**

Well, me. But, honestly, Amy, my mind is so packed of useless information that I always forget labels. If you notice, I didn't answer the question about how you store the strips because I can't remember what the label says. The good news is I don't have to. The label tells you. So go read the label. It'll tell you what to do.

**Amy 33:33**

There you go. Okay, so for the third question that we have, after this year's honey harvest, there were several uncapped supers of nectar. So the water content was pretty high. They're wondering if they can store these frames, or I guess, they're worried about fermentation. What should they do? Should they put them back into the hives? Let the bees finish what they started? Should they try to store them? What are your suggestions on what to do with wet nectar?

**Jamie 33:57**

Yeah, so this is a very important question because those honey producers out there know that you're trying to get honey to a moisture content of 15.5 to 18.5% water. If it's below 15.5, it's prone to granulation. If it's above 18.5, it's prone to fermentation. And of course, 25% is above 18.5%. So this questioner is worried about the water content of their honey because it's wet, just like what you said. So what would I do? Well, I would, as a first option, just leave it on the colony for the bees. They'll use it as they see fit. And that's always the best answer. But if, for some reason, you've taken it off the hives and you don't want to put it back on, the next best option is to freeze it. If you freeze it, then you can thaw it when you want to use it and put it back in the hives. You can probably even get away with refrigeration. Although, I've known some instances where honey can still spoil a little bit if it's not kept cool enough. But I would not store it at room temperature because you are absolutely asking for fermentation. I would not extract it and store it in a settling tank because it's going to ferment. So I would either put it back on the hive, or I would freeze it, but I would not keep it at room temperature or extract it.

**Amy 35:14**

So if you freeze it, then what would you do if you were going to put it back on as a super?

**Jamie 35:18**

Yeah, so let's imagine a scenario, for example, where I had this extra uncapped super that's August, and I don't need the honey, it's uncapped, I'm worried about fermentation. I would just throw it in the freezer. When next spring rolls around or during winter, a colony needs to be fed or whenever, you can take out the whole super or individual frames, thaw them out, and then throw them right into the hive and the bees will do with it what they want to do with it. That's absolutely what I favor. In fact, we do that here at the University of Florida. We have a big walk-in freezer where we can store frames of honey that we can use or frames of uncapped nectar that we can use at anytime throughout the year.

**Amy 35:18**

Yeah, definitely. I wonder if the bees see it as like a nice nectar slushy? I don't know.

**Jamie** 35:58

Probably. If you give it to them cold, I suppose.

**Amy** 36:00

Yeah, definitely. Okay, listeners. If you have other questions, we love hearing from you. Be sure to send us an email or you can send us a question on one of our social media pages. Thanks for listening to today's episode. This episode was edited and produced by our podcast coordinator Mitra Hamzavi. Thanks, Mitra.

**Jamie** 36:27

Visit the UF/IFAS Honey Bee Research and Extension Laboratory's website, UFhoneybee.com, for additional information and resources for today's episode. Email any questions that you want answered on air to honeybee@ifas.ufl.edu. You can also submit questions to us on X, Instagram, or Facebook @UFhoneybeelab. Don't forget to follow us while you're visiting our social media sites. Thank you for listening to Two Bees in a Podcast.