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.

Welcome to another episode of Two Bees in a Podcast. In this episode, we'll be joined by Ian Steppler of Steppler Farms. He's a commercial beekeeper in Canada, who has a very large presence in social media. So he's going to talk about how he uses social media to educate commercial beekeepers around the world. We'll follow that with a Five Minute Management on rules and regulations regarding beekeeping, how you can know what rules there are in your area and ensure that you're following them. And of course, we'll end today's podcast with the question and answer segment. Hello, everyone, and welcome to another segment of Two Bees in a Podcast. We are fortunate to be joined today by Ian Steppler of Steppler Farms. He is a commercial beekeeper in Canada. And we've looked up a lot of information about him and Ian, what you do as a beekeeper is cool. And so we look forward to talking with you about your business, your operation, what advice you have for commercial beekeepers. So Ian, welcome to Two Bees in a Podcast.

Well, thanks for that. Jamie. I'm more than flattered to be here with you today.

Great. Ian, one of the things that we try to do through this podcast is we want to make it relevant to commercial beekeepers, beekeepers, of course around the world, but specifically commercial beekeepers, because we want to make sure that there's a way that they can get cutting edge information, new ideas. So we spend a lot of time talking to bee scientists as new reports or papers or projects are unfolded. But we also really love to talk to successful commercial beekeeping. And Ian, I've got to admit, as we talk a little bit beforehand here, I've only ever lived in warm climates. I did spend six months in Germany on a sabbatical, but for the rest of my 43 years I've been in hot climates and to think about what you have to do to be a successful beekeeper where you are in Canada is pretty mind-
boggling. So as we kind of start this interview, could you just tell us a little bit about yourself and your operation? What do you do as a commercial beekeeper in Canada? And then we’ll get specifically into some of the other cool initiatives that you started specifically with your YouTube channel, etc. So tell us about yourself.

Guest 02:49
It's funny you mentioned that because yeah, a lot of days up here during the winter, I wonder how anything could possibly survive alone, let alone honey bees. Sometimes, you wonder why we live in this country, but there are a lot of benefits too, so there's always a balance to everything. We go through a lot of harshness and a lot of variability. But on the flip side of that, there is a huge abundance that we're able to tap into and that's what we've pretty much focused on to maintain our livelihoods.

Jamie 03:21
Yeah, tell us a little bit about your farm, your business in general, do you focus on pollination, honey production, queen rearing? I noticed here in your bio that you do way more than just bees, right? There's a lot of other things that you diversified into and I think our listeners just want to get to know you here as we start this process.

Guest 03:37
Yeah, so we're a third-generation farm. We've been here, we're gonna have our centennial next year. So farm's been around for about 100 years. And we're very involved with the cattle business and grain farming. That's primarily the basis of our farm. I farm with my brothers, three brothers. One of them manages a cattle farm, one of them manages the grain farm, my other brother flies, he's a captain, he flies the 320. And whenever he's not flying, he's back here farming. And of course, I'm the beekeeper of the farm. So we kind of work together in a symbiotic management practice or management way, I guess you can say, and it works out pretty well. Our farm is located in Miami, Manitoba. So we're about 20 miles off the border just above North Dakota. And we're kind of right on the prairie farmers. We have a lot of flatland. We also farm up in the hills on the escarpment. So we're a very diverse terrain. We're kind of on the edge of the Canadian Shield in a way. And yeah, it's a family effort, and we just do our best to keep things moving forward.

Jamie 04:43
So I'm curious, Ian when I was hearing you talk about that, cattle and all these other things, was keeping bees a new entry to the farm, or has it been a part of the farm since there's been a farm? I mean, where did that jump in?

Guest 04:55
Yeah, we're first-generation beekeepers, and I'm the one that brought the bees into the farm. Back in the late 90s, I went to the University of Manitoba, took my diploma class and knew we were having a lot of trouble keeping the farm solvent. It was a really tough bunch of years, BSC hit us and all this kind of stuff. And we were just struggling and I was just at a high school looking for -- I wanted to continue farming, I wanted to keep doing what we're doing with the grain and cattle farm, but as always, I was looking for something else to help. I wanted to raise a family and look after family. I met Sandy at that time, and we were looking to settle down and just looking for something else. So I went to the University of Manitoba, took a diploma course. And this beekeeping course was offered, but actually, to
be honest, I kind of laughed at it, but I needed two credits to pass the diploma course. So I figured, hey, hell, I'll take this, get through my diploma course and just see where this leads. It's kind of funny. The story kind of goes around. My buddy was in exactly the same situation. He needed two credits to pass his diploma course. And so he said, I guess we'll get through this and we'll graduate. And the only problem was that the class was offered in the evening, Wednesday evening, and that is bar night. And I told my buddy, I said, "Oh, that's not gonna work. We can't miss bar every week." And he said, "No, no, Ian, let's think this through," he said, "We'll go to take this beekeeping class. And then what we'll do is we'll go to the pub after." He said that we can't go to the pub at seven o'clock in the evening anyway, that's too early. We will just go at 10 o'clock after the class ends and we'll go have fun." So we did that, the both of us. And the first couple of classes in, I was hooked just like a lot of people are with bees. It's just so fascinating, and it reaches so many aspects of everybody's life. And so it just kind of grabbed a hold of me and I bought four hives that summer, summer of '99. I think the math is 22 years later, 1500 hives in my winter shed now. So it's been quite a journey for me.

Jamie 06:52
That's a crazy story. It's funny how people fall into this. So yeah, it's amazing. So I've actually visited the area, you and I talked about that. Just very quickly, in my mind where you guys are is pretty cold. What is the length of your season? Are we talking four months? Five? What's the beekeeping season? When the bees wake up after winter and go back down for the next winter, how long is that?

Guest 07:15
Yeah. So up here in Manitoba, right across the prairies, I guess, in Canada, we are kind of dictated by four very distinct seasons. I'm not sure how seasonal you guys are down there. But I think you'd have more of a merger between seasons. Up here, it's spring, summer, fall, and winter, and it's very defined, very distinct. And so we'll put our bees away in the fall. We put them away inside my winter shed in November. And it's pretty much lights out for them right till April. So they're in confinement in that shed for five to five and a half months, which is a long time. So we get them out in April, we start managing them in the spring. And we have week by week by week, things progress so fast. And we hit the honey flow in the middle of June. That honey flow hopefully takes us to September. But the last bunch of years is, things are kind of changing a bit and things are getting a little warmer and drier and there are late summers. So our honey flow is basically middle of June to the middle of August. And then things switch right back into a full-time mode, which we have to get things set up before October, because then winter falls again by November. We have a very long winter. We have a very short but productive summertime period.

Amy 08:36
I always wondered what beekeepers did in the wintertime. What do you guys do? Drink beer?

Guest 08:43
I don't have such a luxury as that because we have the other aspects of the farm going. We have 650 cows that we have out on the farm. So, now, actually, we have 300 calves running around. We're halfway through that. So we have that to do and then also the grain farm, it kind of keeps us busy all other times of the year through harvest. It really makes things busy. This time of year when I'm not over helping with the cattle farm because Andre manages that with his hired guys and such I like to help just around the edges. I like to focus on maintenance projects for the farm, maintaining equipment for the
grain farm or the cattle farm or maintaining equipment for the hive farm and stuff. Right now, I'm just preparing my workload strategy for next spring and just reviewing some videos just to help put some pieces together, mixing some supplements just to help prepare all this feed that we need to feed the bees come spring. So it's not as busy once I put the bees up in spring. The hammer drops on 15 hour days till we put them back away. But I like just to take a little bit of time for myself this time of year too.

Amy 09:50
Sure. Yeah, that makes a lot of sense. I was just kidding about you not having anything to do with your time.

Guest 09:57
Well, we do get a lot of flack. I know there's a lot of southern beekeepers down there that seem to be on the road all the time with their migratory systems. And they're going and they're going and they look at me and I have five and a half months I'm not spending on my bees. They're like, "What do you do with your spare time, drink beer?" Just like you said.

Amy 10:14
Oh, I wasn't the first person.

Jamie 10:16
Well, if it makes you feel any better, those same southern beekeepers ask us what we do with our times.

Guest 10:24
Everything's relative.

Jamie 10:25
Exactly. We're always having to defend ourselves.

Guest 10:27
Relative to the conversation.

Jamie 10:29
There you go.

Amy 10:30
That's fair. Okay, so you've been in the business, you've been a beekeeper for 22 years or so. And I guess I should assume, or could assume that you've had a lot of collaboration during this time. So I guess I'm interested in just who you collaborate with. Do you work with other universilies or researchers? And I know that Jamie will talk to you a little bit about your YouTube channel in a bit. But, what involvement do you have with the general public and all of the above, I guess?

Guest 10:56
Well, that's a pretty big question. When I first got into the business, because I'm a first generation, I was in as a greenhorn, I knew absolutely nothing. I didn't even know what a swarm was. I just got into it.
The interest of the bees themselves just kind of hooked me. So I was in green, I was a rookie. So I reached out. And we didn't have social media at that time, either, not like we do now. Like, you have Facebook, we have Facebook, we have YouTube, we have all these places where we have webinars, I mean, we have all these places that we can reach to, at a moment's notice, to be able to extract the type of information that we're really interested in. I didn't have any of that. So I was kind of by myself trying to figure it out. I bugged my neighbor beekeepers as much as they would tolerate me. But I'd really hinged on associations, especially Manitoba Beekeepers Association and bringing people in to speak to us about beekeeping, beekeeping issues and strategies, all of this, just the world of the honey business. And I remember when, Jamie, you came up to Manitoba Beekeepers Association convention, I forget when that was, it was a little while ago. And you brought a perspective of southern beekeeping from a scientific fact basis and it was just very enlightening, and just connected me with the industry. So I could just kind of figure out some things. And then basically, after that, learning the business with just a school of hard knocks where you get ahead some years and they just slap you back other years. That continual progression as it goes through. I've always respected or appreciated the help that others had provided me as I was trying to get my way through, as I built this beekeeping business up. And because of that, I always felt that I have to, not that I have to, but I like to give some of that back also, as others are going through the same thing, just not looking for answers, just looking for perspective, and just process and just ideas, just conversation is what I'm looking for. And that's basically the whole bit. And as social media kind of crept in a little bit closer, I found my way onto Facebook somehow. And I was just exposed to this community of beekeepers who all assembled on Facebook, on Bee Source as another little forum that we all kind of gathered. And it kind of made the beekeeping world a little bit smaller. We're a very, very small industry. We don't have the ability to go to the coffee shop and talk to other beekeepers like other farmers do. But we can sit down at our computer and we could reach out all across the world and talk beekeeping every morning, and just talk all those issues and such and that just brought everything together. I was just expressing a lot of my ideas, management practices. And one thing led to another. I stumbled into a YouTube project like this, which is just another huge exposure just provides a totally different medium, and it connects you closer to absolutely everybody around you. It's quite an amazing thing.

**Jamie 14:08**
Ian, that's a perfect segue. When we were prepping for interviewing you, I spent some time on your YouTube channel and I was utterly amazed at what you have put together. You're self-producing these videos of different aspects of being a commercial beekeeper, different things that you're showing. And I just saw the number of views on your videos, hundreds of thousands of views, millions of views in a couple of videos’ cases, some of them that were just posted a year ago. So this is an important thing for me to discuss with you because just yesterday I was on another commercial beekeeper who I know well, he has a YouTube channel, which I didn't know. He was getting hundreds of thousands of views, which tells me a couple of things. Number one --

**Amy 14:49**
We need to start YouTube videos?

**Jamie 14:51**
No, what it told me, a couple of things, beekeepers get information from beekeepers, and that's number one. Number two, people like you have such tremendous influence in the industry, because you're
sharing your successes, your failures, your questions, your answers through these videos. In the last 24 hours, looking at that other individual's site and your site, I've just been overwhelmed at what you guys are doing on behalf of the industry. So how did you start producing YouTube videos? What motivated you? And what type of feedback are you receiving from it?

Guest 15:27
Yeah, so there you go. I always felt that our honey bee industry, or beekeeping industry is starved of perspective. And it's the exact same thing as when I was a startup beekeeper. I was looking for some kind of guidance to be able to provide me just that on how people do things. Not necessarily so I could reach in and do what they're doing, but just to help me reach into their mind, and help me understand bees better so I could bring that back into my operation and form my own management practices. It's just that very act of providing perspective. And I've always been a big believer of that. What got me into YouTube is maybe just a little bit of story, might take me five minutes to tell you but I'm going to tell you. So as I kind of stumbled into social media, onto YouTube, and I was talking to beekeepers all over the world, across the country, and such, this one fall somebody from the BC Honey Producers' Association called me up and he said, "Ian, we're in a tight spot. We have a convention in about a month and a half and one of our main speakers fell ill and he can't make it. He's backed up and we're looking for somebody to fill the spot to be a keynote speaker and we need you to come over here and speak to this crowd." And I said, "Like hell I'm going to do that. There's no way I'm going to stand up in front of 300 people and talk about bees. I'm a very shy and reserved person. And so I don't have that ability to express myself in front of crowds, let alone like a table full of people. So I said, "No, I'm not going to do that. That's silly." So he kept at me, kept at me, because he wanted me to speak about a few aspects that I yap about on Bee Source and Facebook. And so finally, he wore me down. And I said, "Yes, I'll do this thing." And when I hung up the phone, I went into a panic, I was like, "What did I just get myself into? Like, I've never spoken in front of a crowd before. How am I going to be able to do this?" So the first thing that comes to my mind was, I gotta see what I sound like, first off, so I took my cell phone, held it up, and I took a video of myself talking and I spoke about bees. That's the only thing I really know really well is bees. So I talked to it, made a little bee video, played it back, was absolutely horrified by the way I sounded and the way I presented myself, so I deleted that video. But I was like, ah, I can't back out of this, I already agreed. I'm not one to disappoint people. So I picked that camera up again, and I made another video and another one, I just practice taking out some of those tics of my speaking and I took it out like and just the way we talk sometimes, it's their demeanor, not that I changed that, but I just tried to get myself used to that. So then I was able to practice speaking what I was doing. So the next thing I did was, well, I gotta make sure that these guys over in BC know me, get a presence of what I am standing in front of them before they see me. So they don't have that first impression like, "Oh, that's Ian Steppler", you know, kind of deal. So I put my video on YouTube. I made a little video channel there, put it on YouTube, and I shared it on Facebook just to show all those guys in BC, yeah, this is Ian Steppler. And after that, I made video and video and practiced. I went to BC Honey Producers' Association, I stood up and spoke three presentations. And it was absolutely brilliant. I had a lot of fun, brought my wife with me, we got away from the farm for a little bit. I come back, and I just kept making these videos. And the thing was, all my life, I've always kept a journal. And then a journal kind of morphed into an online blog, which I kept on my website. And I use this journal and this blog as a source of reflection for myself. As I was saying before, as I was building my business, I'm always looking for a perspective and I could never find it. So what I do is I provide that perspective for myself. And in these blogs, I speak to myself, as if I'm telling myself my thoughts of that
day, I'm telling myself what's happening. So then later on, like this time of year in winter, and I go back
to my blog, my written journal, whatever, and I kind of reflect on what happens. I've kind of like helped
put pieces together for me so that I can then put together a better program the following year as I
beekeep. I find it very interesting because as I'm making these videos now, I'm doing the same thing.
I'm picking that camera and making that daily vlog on my thoughts, exactly what I'm thinking of that day,
of all the conditions around, and how the bees are behaving. And I'm talking to myself as if I'm talking to
myself 15 years ago. So then I go back through the winter like I'm doing right now, I'll compile the
videos together and just see what happened through the year, how the bees reacted, whether it
influenced me, and just putting it all together. Maybe that very act of providing that perspective for
myself to be able to put the pieces together and how these bees are behaving in certain ways and how
I'm managing them and what I did wrong there and what it did right here and what we need to do
moving forward, and providing that out there for others to build to grab hold of, maybe it's just that piece
of perspective everybody's interested in and just, not that they want to do what I'm doing, or can do
what I'm doing, but just seeing what I'm doing to be able to use those bees to do I want them to do if
that makes any sense.

Jamie  20:46
Ian, that was absolutely fascinating to me. I mean, there was so much in there that you were saying. I'm
like, wow. I mean, it's from beginning to end this idea that you video yourself, just because you're
nervous about speaking in front of group, you posted it online, and that you do these video blogs, and
you go back and look at them to give you perspective on what you did for the year and change your
practices. I mean, that's incredible. So that's really neat, gosh, how that led to what you're doing now.
Just for everyone to keep up with us, we're going to make sure and link Ian's YouTube channel in the
show notes for this podcast so you guys can go check out some of the videos he produced. But, man,
Ian, that's cool, it seems like you really think a lot about it before you do these things.

Guest  21:26
It's an interesting thing how this project has kind of evolved because my entire YouTube project is
based around public speaking because I have a tremendous fear of speaking in front of people. It just
helped me take that one step forward and try to achieve a little bit more out of my life and just reach out
because I have this huge amount of built-up energy that I have that I want to put towards the
beekeeping industry. And this whole YouTube project, not only has it helped me with my feedback loop
that I require year after year as I manage my business, but it just has also allowed me to achieve
something different, achieve this ability to reach out to people and communicate and then pour some of
my energy directly into the industry. And it wasn't for the YouTube project, it wasn't for providing me the
ability to practice speaking and get comfortable, I'd never been able to join the Manitoba Beekeepers
Association to sit as a director and pour my energy directly into the industry. And so many things that
we're doing in the association right now is extremely fascinating and fun. It's just a totally different layer
to my life right now. And I've been speaking, this project has taken me right across the country right
through the United States. They've been invited me out to these conventions to speak just to provide
some perspective like I'm talking to you here. And it's provided my wife and I a little bit of an escape
through winter to get out and around and off the farm because the farm is so very controlling
sometimes. So this has offered me a place to extract myself and get away from the farm sometimes
and enjoy life a little bit. And now that COVID has hit, this whole medium is really focused online, and
we're talking more on Zoom conferences and such and I'm speaking all over the world now. People
would never been able to invite me out because of the costs. Now they can drop a couple bucks in my lap and asked me to speak on Zoom at their conventions. Their reach is so tremendous, it's a lot of fun. I'm meeting a lot of interesting beekeepers. I mean, here I am speaking to you on a podcast, Dr. Jamie Ellis, I mean, the fellow I watched speak at the convention a number of years ago, as a beekeeper. I mean, this is very exciting for me. Well, thanks, lan. You're making me blush on the podcast. Amy needs to ask a question now.

Amy 23:57
I feel like I'm watching a fan club talk to another fan club. I feel like Jamie is Ian's new fan and Ian is Jamie's fan. I'll just sit back and let you all finish your conversation from here. It's fine.

Guest 24:15
You asked about who -- everybody has mentors and everybody has people who inspire and look up to and there's a few that I reach -- I don't reach out to but I pay a lot attention to. And Jamie, you're one of them. I always am very fascinated about the work you're doing down in Florida. I see another another one is Randy Oliver out in California. He's providing a huge perspective. And you guys are giving some scientific basis behind the work we're doing as beekeepers, which is extremely important. And that is so valuable to everybody who is trying to keep bees and maybe that's your place, you're in Randy's place. But maybe a place for me is to bring that conversation of beekeeping to beekeepers because that's needed to and how do we take all the scientific information and study this academia? Have all this interesting knowledge? And how do you transfer that down to what we do as beekeepers here on the ground in the hives, kicking the hives everyday? How do we transfer that down there to make our job easier? The way we do that is with conversation. And the way we do that is with sharing ideas. So, I mean, you came up here to Manitoba to speak at our convention a number of years ago, and that is absolutely valuable to everybody in this province because you brought that knowledge. And then the next step is the beekeepers ourselves to be able to take that and figure it out and send it down into what we do as practice. So that's just my philosophy on all things around that.

Jamie 24:31
Thanks, lan.

Amy 25:47
So, lan, you're talking about your audience in the industry and the people who watch your YouTube videos, so I have a couple of questions as far as, I guess, the feedback from your videos and your audience. Generally speaking, whether you have primarily hobbyist backyard beekeepers, or whether you have more commercial beekeepers that are following your videos? And what about the feedback that you have? I assume that it's generally all positive because you have so many followers.

Guest 26:14
Yeah, I have quite the audience. My subscription base is 55,000. And I'm not even sure what that means. But I have roughly, for every video, I post, typically, this is a blog type, journal type, the exercise. So I'm uploading my thoughts almost every day, and I'll get 5, 10, 15,000 every morning, come to watch one of my videos. And then as the video sits there, it lingers and people just watch it. So I'll get like hundreds of thousands of views on videos I post. So I have a reach, I've quite a reach. I'd say my demographic -- there are definitely a lot of hobbyist beekeepers watching. I do have commercial
beekeepers watching. But I wouldn't say my main audience that comes every morning to listen to what I have to say would be the smaller type sideline beekeeper aspiring to be the commercial beekeeper who is looking for those answers, kind of like I was looking for when I was the beekeeper aspiring to be that commercial beekeeper. My audience, basically, are the beekeepers starved for that perspective and looking for answers and just kind of looking to see how they can understand their craft a little better and incorporate practices to help them manage their operations. As I was talking to you earlier, Amy, beekeeping is extremely political. And you wouldn't think that? You tell people how political beekeepers are and they just kind of scoffed at you. But it is. It can be serious at some times. I'm involved with agriculture, so I run that 120-foot boom sprayer across our fields putting chemicals down. So I have that perspective as a grain farmer, which kind of balances out my whole opinion and philosophy on how this whole process moves forward. And because of that, it doesn't read kindly to a certain demographic of beekeepers. So it gets extremely political, especially when you're talking treatments and stuff like that, and just the whole conversation around that. And I get hate mail, like absolute -- Yeah, and I don't look at that as a negative thing. It doesn't drag me down because I look at the bigger picture. There's an offset of that as a lot of supporters and people that are positive with their efforts. But everything has balanced, and you reach out to everybody like that, you're going to have a lot of negative feedback. And my whole thinking is I take those haters, all those negative comments as a compliment because if I'm not reaching into that side a little bit, and I'm not getting that pushback, it means I'm not pushing hard enough to push my perspective forward, just to add to the conversation. And a lot of those people, not that there are a lot of people I just ignore, but there are a lot of people who are dead against my way of thinking and my perspective on how things are evolving forward. They all email me, they say, "Ian, I don't agree with a single thing you say. But I do appreciate listening to your perspective because that just helps me understand what's happening and what's going on." And I'm not trying to change their minds, and they're not trying to change mine. It's just a conversation. And I love the conversation between people who disagree. You listen to two people that agree on something and it's very boring because they just complement each other. But if you listen to two people that have a difference in their ways of thinking, then you pull out those little aspects in the conversation that is gold, absolute gold. If you can involve that conversation in front of an audience like social media or something like that, you reach so many people with this, as long as the conversation is civil. You just reach that conversation, it reaches so many people, and it just makes everybody better for it, I think. Not that we're trying to change ideas, it's just providing the conversation so everybody can make up their own bloody mind. So that's just kind of the way I look at it with YouTube and my exposure.

Amy  28:26
So do we.

Jamie  30:18
Yeah, Ian, I think that's incredibly inspirational. We are also out there, we do podcasts, we do social media, where I'm going around the world teaching, Amy is too, and Cameron who's also at the lab, and Emberto and others. And I find the more out there you are, the more vulnerable you are to criticism. And a lot of it is just people who are kind of driving by, throwing in a grenade, and driving off, but there are some people who truly can benefit. One of the things that I've had -- there's a faculty member here at the University of Florida who works with genetically modified organisms, and I'm not sure what could be a more controversial topic in the eyes of the public than that. But he said that he always tries to answer his critics on these social media, not because he expects to change the critic's mind, but
because he expects to change the mind of those people who are watching the debate. And so he felt that it's very necessary to respond to people who were trolled, or what have you because he said, again, you are not going to change the mind of that person who's vehemently against you or science or whatever it is that you said or did, but there are people watching who can benefit and learn. There are more people who are going to change from that discussion than there are who's going to follow that person who just lobbed the grenade and drove off. And I think that's sound advice and it's nice to hear you say the same thing.

Guest 31:33
I learned one thing along this whole path, and that is to stay away from actual politics, that right and left type politics deal. A lot of the issues that we talk within the beekeeping community are weighted right or they're weighted left. I find as long as I keep the conversation between those two camps, within the beekeeping context, and keep that whole layer of external politics out of it, that it makes the conversation between us a lot more civil. I made the mistake a little while ago, up in Canada here, we have our liberals and our conservatives, and I am conservative, and so I openly shared my conservative views on everything politics and it just brings a negative tone back into the beekeeping conversation I thought wasn't useful. So why am I doing that? If I'm trying to reach out to beekeepers and contribute to the conversation, why am I muddying the water with all this other bullshit when I should just focus on bees, and just let that conversation take its way? You know what I mean?

Jamie 32:35
Absolutely agreed. So there's so much sound advice that you're giving. I wish I had heard this, personally, a long time ago because like I said, it's easy to get detracted when people are lobbing grenades, but it's a really neat perspective that you're giving. Let me wind down the interview. There's so much I want to talk to you about. We're going to have to have you back because this interface between cattle and bees is very important to me. We could talk about planning for bees, planning for cattle. That's a really big deal here in Florida. A lot of these grazing lands, the farmers are thinking, "Well, maybe we can put stuff that can benefit cattle and pollinators." We need to have your back and get your perspective on that. But as we just kind of wind down this particular one, where you've been focusing on your social media, how you got into bees, etc., what advice do you have for farmers or ranchers, like yourself, your family, looking to start beekeeping or having bees on their property?

Guest 33:20
Well, that's a good question. So I'll just kind of reflect back to when I started my beekeeping journey and just some of the thoughts that, now, I see as if I was going to give somebody advice and who maybe wants to start up a little beekeeping operation. And probably the first thing you got to be aware of is the amount of natural resources out there for those bees to build to forage on. It's just like cattle pasture. If the cattle pasture can hold 80 cow calf pairs, and you put 120 in there, those cows are going to be starving some time throughout that season. So you got to make sure that we're managing our resources accordingly to be able to sustain these hives, because if there isn't enough out there, then you've got to really make sure either you focus on nutrition or the management of that colony around that or you find another place because there's a lot of beekeepers within the countryside and beekeeping is very territorial. And that's something that new beekeepers don't appreciate is an existing bee farm that's managed this property all their lives, even though they don't own the property, you know there gentleman's agreement is that it's their territory. And if anybody dips their toe in that territory,
they’re starting to throw knives. And we have to respect that in a lot of ways. So the first thing, apparently, the biggest mistake I made was I started up my little beekeeping business, and we have a lot of land here, like we have a 3500 acre grain farm and how much other, I forget how much ranch land, we have. So we probably have five or 6000 acres of land so I started putting my bees out in my land. And I have absolutely every right to do that because it’s my property. But I didn’t consider the other beekeepers in the area who already was holding that territory, one beekeepers for over 100 years, and I kind of stepped on their toes. All I had to do was go out and talk to that beekeeper and say, “Hey, I’m here, make a little bit of space for me if you don’t mind. I’m aspiring to be a beekeeper. This is my property.” And I bet you nine times out of 10, they appreciate that the landowner is the ruler, and you have to abide by that, and they may probably back off. But I stepped on their toes, and I pushed him out without communication. And those guys still don’t talk to me to this day. It’s just very dangerous. So not dangerous, but it’s not the way, it’s not proper etiquette. So that would be the first thing, just kind of see what’s going on, take a look at the environment, you’re trying to keep your bees and see who’s out there already tapping into the natural resource, and then just kind of integrate your way into the beekeeping business. So that’s my biggest tip of advice for anybody want to get into bees on their own property.

**Jamie 36:02**

And that's again, sage advice like your YouTube channel. All the advice you’re giving us, I like this idea of communication, it boils down to communication. Your YouTube channel is the way you communicate, your talking even when you give advice you have for folks getting into the business, they need to communicate with other beekeepers, etc. I think that's neat.

**Guest 36:18**

Take it a step further, you want to communicate with your neighbors, too, that you’re going to be foraging your bees over because they have to know that you're there. And they have to know that what they do on their property directly affects what happens in our hives. So that line of communication is very important, you reach out to those landowners. And they don’t want to hurt your bees, they want to see you thrive. And we’re part of the community and they want to see everybody prosper in the same way. As bees, we’re providing them the benefit of pollination. But if they don’t know we’re here, then they can’t help adjust their management practices to avoid some conflict further down the line. And that goes for beekeepers, too. We have to understand, as we’re tapping that resource across the countryside on other people's property, as they’re making their livelihood, as beekeepers, we need to realize that they have to maintain their management practices and such. So we have to be able to provide that line of communication to help them make decisions that won't negatively affect us. And a lot of that is spring. And a lot of that, as we incorporate certain management strategies on our farm to be able to manage in a way that doesn't hurt our bees, we’d like our neighbors to do the same thing. And all they're looking for is guidance. If they can just switch a little bit of their management practices around, maybe it’s not as convenient, but just a little bit of extra effort protects not only the bees, but the natural environment too. Little things like spraying for bugs. If they know that there are certain spray holes with heavy residue, or it's going to directly affect the health of my bees or the natural world by spraying at a certain time, you just tell them, "Please, if you could just spray in the evening, spraying in the evening allows them to target your bugs a little more effectively, my bees are away, and they have that act of controlling your insects all night while my bees are away. By the time morning comes, insecticide... every residue will be burnt off and my bees won't be affected as badly." And they can also
make other choices, better choices like technologies are available now. There's one spray called Corrigan. It allows producers to spray for caterpillars or worms or grasshoppers that don't affect the bees as much. It costs five bucks an acre more or so, but it's just an extra little step, a little effort. And those landowners know that by just helping a little bit, it just allows us to thrive as beekeepers as we struggle to manage our businesses and it directly benefits what they're doing in their operations too. That line of communication, I'm a big believer in that. And as long as we keep talking to each other, I think we're able to solve more of our problems in a more proactive way. And that was well said. I think that's a great affirmation on all we've talked about. Communication is key. And thank you so much for joining on this podcast. I think our listeners are really going to benefit from all the things that you were able to share with us. Yeah, well, Jamie and Amy, I certainly appreciate you reaching out to me and showing your interest toward me. I'm quite flattered about that. And I'm more than happy to join you in the conversation. I think I'm going to head back to the cattle farm now and probably going to have to go for some shit.

Jamie 39:26
Well, you have fun with that.

Amy 39:28
I'm like, you have to what? Oh.

Jamie 39:34
Well, everybody, that was Ian Steppler of Steppler Farms. He's a commercial beekeeper in Canada. He's got a great blog, a great YouTube channel, it's called a Canadian Beekeepers blog. We'll make sure and link that in our show notes. And thank you for listening to this segment of Two Bees in a Podcast.

39:58
Have questions or comments? Don't forget to like and follow us on Facebook, Instagram, and Twitter @ UF Honey Bee Lab.

Amy 40:19
All right, Jamie, I'm really hoping that, at this time, we have a really cool Five Minute Management. Have you listened to our Five Minute Management?

Jamie 40:31
I mean, I am The Five Minute Management so I don't listen to it. But I'm also hoping we have an interesting one.

Amy 40:38
We do. It's really awesome. All right. Okay. I'm gonna go ahead.

Jamie 40:44
I hope that's the case.

Amy 40:46
All right. I have pressed start. And my question, so our topic for our Five Minute Management today is talking about rules and regulations.

**Jamie** 40:53
Womp, womp, womp. How is that interesting?

**Amy** 40:56
It is interesting. People want to know all that information. Where do they check in your area? How do you know what the rules and regulations are?

**Jamie** 41:03
Yeah, those are really good questions. And they're important questions, because the way that laws work is it doesn't matter if you're ignorant of the laws. If you break them, you're still responsible for that. And so I know we have listeners around the world. So it's going to vary slightly. This will be a bit of a US-centric answer, but I think there will be parallels and similar groups in other countries around the world. So here's where you start. Number one, in many states in the US, there are state apiary inspection programs. Those are usually housed in the Department of Ag. So a quick Google search, "the name of your state + apiary inspection rules" will get you to that. For example, if you live in Florida, "Florida apiary inspection rules." If you live in the UK, "UK apiary inspection rules," and that will usually get you where you need to go to see what the rules and regulations are related to keeping bees in your state, your region, or even for that matter, in your country. And that's very important. Some states, such as Florida, have very robust apiary inspection rules. In the state of Florida, you have to register your colonies if you keep bees and that's true in some other countries around the world. So you start by Google searching that. You might also check with other beekeepers because beekeepers in your area, especially commercial beekeepers, are going to be clued into the local rules and regulations because they're going to have to be following them if they're expecting to sell their honey or pollination services. So check with your state or local authority. The next group that I would look at is your very, very local authority. What do I mean by that? Your city, your county, because there might be zoning and city ordinances relating --

**Amy** 42:43
Sydney ordinances?

**Jamie** 42:44
Sydney, I know. If you're in Australia, that was for you. Zoning and city ordinances for keeping up livestock in your area. In the state of Florida, the state supersedes those local ordinances. But in other places, those city or local ordinances might be in place and say that you can or can't keep bees in your backyard or you can or can't keep bees in your subdivision, which I think leads me to a very important next point. If you live in an area and are governed by a homeowner's association in your area, you need to check with your homeowners' association. It is very possible that your local homeowners' association will not permit you to keep bees. And it's funny, even though the state or the city, you would think supersedes the homeowners’ association, in many instances, they don't, because what happens is when you sign into a homeowner's association, you are submitting to their authority voluntarily. So you need to check with your HOA. You also need to know that there are often rules and regulations related to honey houses, bottling and selling honey, since honey as a food commodity, it often has to
be bottled in an area that is regulated. So it's very important that if you are selling honey, that you look for your local city or state honey house bottling and selling ordinances. And again, if you're struggling to figure out where to find these, just find a commercial beekeeper in your area because he or she's probably having to live by these rules as well, and they'll be able to point you in the right direction. And the final bit of advice that I can give you, if you remove colonies as part of your beekeeping business, in other words, someone calls you as a beekeeper and says, "I have bees nesting in the wall of my house or in a tree trunk, etc." you very well may be governed by rules. And the reason for that is because, in many areas, removing colonies is considered pest control. In many areas, those individuals practicing pest control have to do so with a license, with insurance, etc. So it's very important that you look into local pest control ordinances. If you live in the US, a lot of this information you might be able to find from your local land grant university. In the state of Florida, for example, that's us here at UF. We might know where those rules and regulations can be found. You can also check with your local county extension office and talk to your county agent. If you live outside of the US, you would try to find your local equivalent of a bee extension specialist. But there's really a great resource in commercial beekeepers for you because they're going to know these rules and regulations because they have to live by them in order to conduct their business legally.

Amy 45:19
Oh, my gosh, we're at 15 seconds. I almost said 16 seconds.

Jamie 45:22
Perfect. Yeah. I'm perfect. Well, if I've got that much time, I want to just say we're going to link a document I wrote in the show notes that will give you some pointers on how to figure out what these rules and regulations are and how to find them.

Amy 45:35
Great.

Stump The Chump 45:43
It's everybody's favorite game show, Stump the Chump.

Amy 45:56
All right, Jamie, it's that question and answer time. I've got three questions that are mostly from Twitter, which I feel like, I am so sorry to these people who asked this. I haven't checked the Twitter in a long time.

Jamie 46:08
It's funny because I only look at the Instagram. I've got the Instagram, the Instagram, that sounded so old man, I only look at the Instagram. No, I only look at the Instagram account because that's the app I have on my phone. I don't even look at the Facebook or Twitter. So if you're looking principally at Facebook, and I'm looking at principally Instagram, then the poor Twitter folks are the ones who are not getting their questions answered.

Amy 46:29
We're finally getting to the Twitter folks. So the first question is why is swarm control so important? We always talk about swarm control. But surely they should be allowed to swarm because it's natural, right? That's what they want to do the most of, that's what you typically hear.

**Jamie 46:47**
Amy, these are interesting questions. And the benefit of being me and you is that we see the whole question, right? This individual is really wanting to know, well, besides honey production and preventing them from being a pest to others, why would I want to stop swarming? It's natural. And those are both good comments. So, first of all, swarm control is important, because swarm season happens during the same time, usually, this is a generalization, it happens when you're wanting your bees to make honey. So if the colony is splitting, you're losing a lot of the workforce to make honey, so it's important for honey production. Secondly, when you're sending out a lot of swarms into the environment, especially if you live in urban or suburban areas, those bees are likely going to nest somewhere that ends up being a nuisance for other folks, right? They're going to nest in the wall of someone's house, in their chimney, they're going to nest in their tree, they're going to nest in their water meter box, what have you. So they're going to be a nuisance to other people. And the questioner said, "Well, besides those two things, why would I want to control swarming since swarming is natural?" Well, besides those two things, why would I want to control swarming since swarming is natural? Well, swarming is natural. But I will tell you that in agriculture, we constantly are controlling reproduction and our livestock. We do that for cows, and for chickens, etc. So you could ask the same question of any livestock production system. Well, why are we stopping our chickens from producing, or reproducing or our sheep or cows or what have you? To me, the best non-honey production, and best non being a pest other reason that I can offer you for controlling swarming is that when we allow our bees to swarm, we have a lot of unmanaged colonies being produced in our area. And those colonies become reservoirs for diseases and pests because there's not a beekeeper linked to those colonies controlling those diseases and pests. So allowing your colonies to swarm keeps the disease and pest population high in your area. And the moment you control it in your colonies, those swarm colonies that you allowed to be in the environment, they're out there providing those diseases and pests to reinoculate their colonies. So if you don't think about a from a honey production standpoint, if you don't think about it from your colony swarming and other people's houses and being a problem for them, then you can think about how it can be a problem for the colonies that you're trying to manage because those unmanaged colonies in the environment are just spinning off problems for your bees. They're competing with your bees for resources, they're spouting off diseases and pests. So I think that reason alone would be another good reason to control swarming in honey bee colonies. I do get, though, that there's this growing contingency of beekeepers out there calling themselves natural beekeepers and natural beekeeping. And then with that philosophy, they allow their colonies to swarm, and I'm not knocking that philosophy at all. I'm just saying that in those cases, you're going to produce less honey, your bees are going to be a nuisance for other folks, and those swarms are potentially going to be a disease and pest reservoir, not to mention compete with the bees that you're managing. So I think there's a lot of reasons to try to control swarming in bee colonies.

**Amy 49:59**
Yeah, definitely, and as beekeepers and bee people, sometimes I think we forget that there are people out there that don't like bees. They just don't.

**Jamie 50:07**
Absolutely, yeah.

Amy 50:08
You know?

Jamie 50:09
Absolutely.

Amy 50:09
Anyway, okay, so for the second question, the question is, how do I prevent mosquito breeding in my water sources? And so I asked this, and then I also ask you, Jamie, what does that have to do with bees?

Jamie 50:20
Yeah, I don't think I've ever been asked this question ever. So it's really neat to see it. And again, the beneficiary of being able to see the behind the scenes question, they're also asking another one of those questions, kind of like the swarm question. Well, why is swarming important beyond these two reasons? Well, how do I stop mosquitoes from breeding in my water, beyond changing the water every couple of days? Well, there is a lot going on here. First of all, bees need water. They need water, especially during the hot times of the year for thermoregulation purposes. The bees will go to whatever the local water source is, and they're going to collect that water and they're going to bring it back to their hive and they're going to sprinkle it around the nest. They're going to stand at the nest entrance, fan their wings, that evaporates off the water, and through that evapotranspiration, you cool the nest. So this is important. And even, for example, where I live, there are no local swimming pools, streams, birdbaths, ponds, lakes, or anything. So if bees are going to have water where I live during the summer, which they need, where I live, then I'm going to have to provide it to them. So I've done that before in lots of different ways. I've provided water sources and feeding troughs as an example. But that then produces a potential breeding reservoir for mosquitoes, right? If we're going to be providing standing water for our bees, we are also producing an area where mosquitoes can breed, lay eggs, and reproduce. And one of the chief recommendations for reducing the mosquito loads in one's yard is to remove all stagnant water, flowerpots, anything that might be holding water. That's a place where mosquitoes can breed.

Amy 52:10
Mosquitoes can actually breed in a two-liter bottle cap.

Jamie 52:13
Exactly, they need very little water. We see the mosquito larva in our dogs' watering pails, for example. So they don't need much water. And they don't need much water long before they're going to be laying eggs and having mosquito larvae come out. And so you need to get rid of standing water. So the individual's asking the question, "How can I provide a water source and not have to change it regularly?" Well, number one, that's not going to be easy to do. If you're going to provide that trough-like water source where you fill a trough with water and you put some sort of flotation on top of it, then you're going to get mosquitoes, and you're going to have to clean that thing out one or two times weekly to stay ahead of the mosquito reproduction cycle. So the questioner then wants to know, how
can I do that without having to go out there and clean that tub out two times a week? Well, one way is to have a really large tub, like a horse watering trough as an example. And then you can actually put fish in those troughs. I know a lot of farmers in our area who do that. They provide water troughs for their cattle, and they're really big water troughs. And what they do is they just go buy goldfish and throw the goldfish in the troughs and the goldfish eat the mosquito larvae. So, that's one way to do it. So you're going to have to have a trough of critical size that can support the fish population. But maybe a better way to do it is rather than getting a bigger trough and throwing fish in it, is just change the way that you provide water to bees. One of the ways that I have done it is I've used those entrance feeders, those little plastic or metal things that slide in the entrance of colonies that you put a jar of sugar water in. Well, instead of putting jars of sugar water in it, I put jars of water. What I've done is I have folks who own horses who live on either side of me. And for a while, when I first started keeping bees in the area where I live, my bees would go to their water troughs and drink water, and I would see that. It would terrify me. Their horses were going there drinking water where my bees were. So I've started putting water in these entrance feeders of my colonies, and it greatly reduced the activity at my neighbor's water troughs. So that is a great way to provide water to bees in a way that mosquitoes cannot use it. So you can either increase the size of your water trough and throw some fish in there that are known to eat mosquito larvae, or you can provide water a completely different way. The alternative is you're just going to have to go dump out and refill those water sources a couple of times a week if you want to stay ahead of the mosquitoes.

Amy 54:45
The trough and the fish seem a little excessive.

Jamie 54:48
But it's fun, though, Amy. It's fun. It's really interesting because these friends of mine from our church, they actually go and will net out those goldfish and they'll give them to children at a lot of youth fairs. It's just a neat way. I never knew that people do this, but it is very common in the cattle industry here in the state of Florida. So I think it's a really neat way to do it.

Amy 55:01
That is so sad. That's pretty cool. Okay, so for our last question, what is the best method of storing supers and deep frames season to season? I know that I always have extra supers and extra frames laying around. And so how do we store that?

Jamie 55:25
Okay, so I'm going to go from the best way and back my way down to the easiest way.

Amy 55:29
The worst way?

Jamie 55:30
Yeah, well, if you think about it, the best way is to freeze the combs.

Amy 55:34
But nobody has a freezer that big.
Jamie  55:36
That's the key is that it's the best way is to freeze the comb, leave them frozen in that freezer until it's
time to use them again in the next honey flow. So I'm assuming if you've got more than one or two
colonies, then you likely don't have enough freezer space to freeze those supers when not in use. And
so what a lot of beekeepers do, and this is what I did when I had more colonies when I was growing up
in Georgia and had more time to take care of bees, when the combs were not in use, I would store
them in my grandfather's dairy barn using moth crystals. The big risk to the comb are wax moths and
so wax moths like to move into stored combs and completely demolish them. And so I would follow the
instructions on the wax moth crystals. And at the time, you would stack a few supers, put down a sheet
of newspaper, pour whatever the amount of labeled use of wax moth crystals were on the newspaper,
stack a few more combs, put another sheet of newspaper, pour some more crystal, stack a few more
combs, etc. And I would check the crystal level throughout the winter season or throughout the storage
season to make sure that there were enough wax moth crystals, and then I would follow the label about
airing out the supers enough time before putting them back on the bees. And so that's another good
way. A third good way is if you have an open-air shed, and this would be a shed that's like a pole barn,
right? It's got a roof over the top, but at least two or three sides are open. You can crisscross stack your
supers. So you'll put a super down and then the super that goes on top of that will go at a 90-degree
angle to it. Well, the super that goes on top of that will go to a 90-degree angle on top of that. You just
crisscross them on the way up because wax moths do not like air and light. So if you store your supers
kind of in this crisscross pattern, you're getting a lot of air and light into it. And it's a good way to deter
wax moths from laying eggs in there. I will caution you, though, if it's a closed shed and you do this,
wax moths are going to destroy the combs. And my other caveat is this doesn't work well if the comb is
dark. So if brood has been raised in that comb or been reared in that comb, stacking it this way in an
open-air shed won't work because wax moths prefer dark comb, and you have to go to greater lengths
to stop wax moths from damaging dark comb like freezing or adding the wax moth crystals. And the
final way, the final recommendation I would give for storing combs is you can store them on the hives
themselves. That's actually what I've done for the last few years for the bees on my property. I didn't
have freezer space, the comb was dark, and it had brood reared in it. I knew the wax moths were going
to take it out if I put it in the shed. So what I would do is I would go back to my colonies and just store
two or three empty supers just on top of the colonies, combs and all, so the combs are there, the bees
can protect them. And as long as the colonies are strong and healthy, then they're able to police that
comb and make sure the wax moths stay out of it. So those four ways, freezing, using wax moth
crystals, storing it in that crisscross pattern in the open-air shed, or storing it actually on the hives
themselves are all ways that I've used in the past.

Amy  55:36
That's interesting. And when you're putting the super on top of an established colony, that doesn't
provide them too much space.

Jamie  57:10
So it doesn't. One of the concerns that I always had when I was doing this is that if the colony retracts,
let's think about it this way, let's just say for the sake of argument that your standard hive size is one
deep and one medium, and that's what the bees are filling. And now you've thrown two medium supers
on top of that for the bees to police. If that colony starts to weaken, and they're no longer patrolling
those uppermost supers, wax moths can certainly move into those things and damage. So you really want to make sure, you want to check it every few weeks and make sure that there's no wax moths moving into it. In my opinion, Amy, there's really no such thing as too much space for bees during the offseason, as long as they're adequately able to protect that comb. If you're starting to see the least little bit of wax moth webbing in those supers, then you've got to do something else quickly to make sure that the wax moths don't take them out.

Amy  59:38
Alrighty. Thank you very much. And so those questions actually came from Gale's Honey Bees, Andy and Bob Porter. So I know that they've all been active listeners from the very beginning.

Jamie  59:48
Thank you guys.

Amy  59:48
So yeah, thank you so much, and everyone else who's been listening, hopefully, we'll get to your questions if we have not already. But go ahead and send us an email or send us a comment or message us on any of our social media pages, and I promise we will start checking every single one of our social media pages. Thanks, again. Hey, everyone, thanks for listening today. We'd like to give an extra special thank you to our podcast coordinator Lauren Goldstein and to our audio engineer James Weaver. Without their hard work, Two Bees in a Podcast would not be possible.

Jamie  1:00:28
For more information and additional resources for today's episode, don't forget to visit the UF/IFAS Honey Bee Research Extension Laboratory's website ufhoneybee.com Do you have questions you want answered on air? If so, email them to honeybee@ifas.ufl.edu or message us on Twitter, Instagram or Facebook @UFhoneybeelab. While there don't forget to follow us. Thank you for listening to Two Bees in a Podcast!