[0:00]
[music]

Maggie: Welcome to the Young Farmers Food Safety Focus Group series. I'm Maggie Kaiser, the produce safety training coordinator for the National Young Farmers Coalition. Throughout the summer of 2020, I, along with Brie Sliker, Billy Mitchell and Farmer Facilitators from across the country, hosted a series of focus groups with farmers, where we discussed the challenges and successes of implementing various on farm produce safety practices and we recorded them because we want these conversations to be a resource for you. In every session we bring together farmers with similar experiences for a discussion about a specific farm food safety topic, we begin each one with a farmer presentation, followed by a roundtable discussion where farmers share problems and solutions with one another. We hope you enjoy them and bind some practical information for your farm.

[music]
[1:06]

Maggie: So, to kick it off, we're gonna do some introductions for the rest of you. I'll have Bre and Billy go first, since they are the other two that are really helping make these focus groups possible, and then we'll just invite the rest. We'll invite the next person to go, so I will ask you to go first Billy. Then we'll pass around from there.

[1:29]

Billy: Hey all, my name is Billy Mitchell. I live in Georgia down on the coast in Brunswick, GA and worked for the National Farmers Union, a farm efficacy group based out of Washington DC. Pre-pandemic I spent a lot of my time traveling around the country, visiting small farms, seeing the challenges, and solution that farmers are coming up with. I've been looking forward to this focus group for awhile. I got a chance to talk to Oscar a couple weeks ago now and it just made me excited. Brie you'll go next.

[2:02]

Bre: Hi everyone, my name is Bre Sliker. I go by she/her pronouns and I am interning at Young Farmers Coalition with Maggie this summer helping her with these focus groups. In addition to being an intern I am also a graduate student at NYU in the Food Studies Department.

[2:24]

Maggie: Rachel, hi!

[2:27]

Rachel: Hi my name is Rachel. I use she/her pronouns. I am in my first season at Bad Weather Farm which is a micro farm in Seattle, WA that I'm running. We have a diversified vegetable operation, cut flowers and then we have chickens and ducks for eggs. Lisa it's your turn.

[2:48]

Lisa: I'm Lisa Welch. I go by she/her. I have a microgreen farm in Florida.

[2:55]

Maggie: I think Oscars the next one. So you want to invite Oscar? You can do a more in depth introduction and start sharing your screen and go right into your presentation.

[3:06]

Oscar: So, when you said I had a couple of year's experience, I have a couple of years of failures, but I appreciate that. It is our first year on this property and that's basically where we're starting from

scratch. This has been an interesting year to say the least, with everything going on. So, I will go ahead and get started. Of course, this is our building blocks of food safety and just full disclosure, I am not gap certified yet. That is one of our goals and that's what this is all about. I've been working with the Carolina Farm Stewardship Association one on one with Kim Butts. She's been helping me out along the way and kind of guiding me which happened in the beginning of the year. Well, it happened last year when I sat in on a workshop for a gap certification. That was very eye opening for me because I do not have an agricultural background so that's what I'm going to talk about in this presentation. So, 2 1/2 years ago I found out that my wife was pregnant and it was just like we got to grow our own food. I was very fortunate to have some landlords where we were renting allow us to do an inground garden. Matter of fact, they even allowed it to be 25 feet by 32. That's where I got my feet wet. So, we knew we wanted to be a market garden farm and we finally got our own piece of property which we moved on to this year, January 15th. I think that was when I realized, well hey, maybe restaurants is where we need to go for first. What I saw on my plate were microgreens and I was like, oh this is it. You know I already learned a little bit about microgreens but had never implemented it. I realized that it was something I could scale up fairly quick with a small footprint. With that, I built a very rudimentary PVC shelf and had my little shop lights and of course I had my my trials and errors there. Eventually after pounding on the pavement and trying to get into this one restaurant for 7 months, I think I finally broke the guy into submission and he finally was said alright, I like this, and I like this. Can you grow that for me? The following year we scaled that up even more, and by the end of the year, I think we were up to about 15 restaurants. Realizing how many restaurants we were in and how many people were eating our food, we realize how important it was to make sure that we were as safe as possible with our food practices and growing. So, that's when I learned a little bit about these different organizations like the Carolina Farm Stewardship Program, which led me to taking that workshop. That's when it kind of opened up my eyes and saying, wow, there's there's a lot involved. There's more, more things involved in just regular soap and water for certain things. There's certain infrastructures that I didn't even think about because we were just so small and nobody thinks about that in year one. I knew that getting on to this property I wanted to start off with the right foot. So, that's when I got in touch with Kim Butts from the Carolina Farm Stewardship Program, who then helped me to develop a food safety plan for our farm. We're a family run farm, so we don't really have any employees at the moment other than I've had a friend of mine volunteer this summer to help out every now and then. I'm a first generation farmer, I guess once removed if you want to say like that because my grandparents farmed on my mom's side in Cuba and my dad's side in Guatemala. I had to learn a lot to get to this point and there was a lot of trial and error. So back to the outlets, we do have a juice bar that we sell to as well. A good percentage of our business is restaurants, probably about 80% of it is restaurants. So, some of the goals that we have within the year to two years is, we were looking at gap certified. That was something we were going to try to do this year. It was just a little difficult with everything that happened to get it done this year. Now that we have a better grasp of what's going on and we needed time to develop our systems and stuff as well. I don't think we were ready for that yet. We continue pushing forward with our food safety plan and putting these SOPs in place to make sure that everything is in line when the auditor does come out (and we are getting charged per hour) that we're not paying too much. It's important to be prepared, right?Being gap certified opens up other outlets for us and we one of the outlets that we've been keeping our eye on a lot in this area has been grocery stores. We can't get into grocery stores, at least the bigger ones, until we are gap certified. So, that was one of the big driving forces for us next to of course, our customer safety as well as getting into our local schools. I think a lot of the children need to learn more about how important it is to get local fresh food that's not only fresh, but organic. That's another reason that we put on our goals for the end of the year. We're applying for our organic certification. You know, we're just trying to make sure we dot our i's and cross our t's and not the other way around. So, we're hoping that by April 2021 that we will be organic certified and just trying to take on as best as sustainable practices as we can to make sure that we take care of the land and make this land better than how we received it. Our year one infrastructure and strategies are first and foremost working with Kim Butts, we put together a food safety plan, and man she's very thorough. She's very thorough in things I wouldn't have thought about. It's important to have these relationships. Don't try to do it on your own, there's just so much involved that you're gonna miss something.

[9:31]

Billy: What's one or two of the things that you didn't think of with your food safety plan that you can point out?

[9:35]

Oscar: For instance, I didn't think about the fact that the totes should be on top of pallets and being off the ground, especially when you're harvesting. You see these people on YouTube and they're dragging their harvest tote right on top of the bed. You don't think that maybe that shouldn't be touching the ground. So, one of the things I saw in the presentation they did was one farmer clipped the tote onto a milk crate and the milk crate was the one that was making the contact to the ground and not the harvester. So, it's like little things like that you just don't think about how it could spread certain bacteria. That and the animals, and though we don't have animals, that was another thing that eventually we wanted on a personal level to have some chickens, or maybe some goats to work with our cover crops. I just didn't think how you had to make sure that things were secluded away and that the animals aren't anywhere near the crops. I mean, in a way you kind of think about it, but when you're first starting out, that's not what's on your mind. A risk assessment was another one that starting out from scratch, I didn't fully grasp how much was involved with that labeling, for instance, and just having a way to have traceability, how important that was. In the beginning you just think about, oh, I gotta grow this crop. It's gotta be great. I gotta make sure it looks really good. Then I gotta try to sell it. The last thing you're thinking about, which is not good because you should think about it, are all these little procedures, these SOPs, and there's a ton more.

[11:18]

Billy: Yeah, that that makes sense. Rachel, I think you mentioned that you have animals? Did you have any questions or thoughts about how the animals interact on your farm and potential food safety risks?

[11:29]

Rachel: I mean we have been fencing. Our farm is so small that to some extent it's impossible to prevent interaction, but we've been fencing off areas where food is being grown versus more of the animal zone and that also helps. So then they don't eat my food. We have a little pond for the ducks and we're still learning about ways that we could be using fertigation where it's irrigation that's also fertilizer that comes from essentially the pond water. That obviously has some huge ramifications for food safety, so we're doing a lot of research on that before we move forward with it. Yeah, it's all just thinking and musing on things a lot right now.

[12:18]

Maggie: Yeah, especially being in urban environments with with animals it gets hard. I have chickens and ducks too so I get it. Maybe we'll get back to you Oscar, do wanna talk about your testing and water sources now?

[12:31]

Oscar: Absolutely. So, I didn't know the different levels for instance surface water poses a higher risk then say well water versus city water pressure blah blah blah. I didn't realize that at all. I would have thought surface water is safer. There's a lot that goes in that's involved with making sure that it’s safe, and so I feel you, Rachel. I was right there. I wanted to collect some rainwater and all that. So I mean, we still will get to that point. It's part of that whole sustainable model. But now I'm open to the fact that, well, if we are going to do that, what strategies do we have to take to make sure that it's safe?

[13:12]

Rachel: Do you have strategies that you're looking at for using rainwater in a way that's safe? We try to use it as much as we can. I mean, we're in Seattle, so we get a ton of rain, and obviously it's a lot cheaper than using city water. So, I'd love to hear if you have ways that you know of to make it really safe for folks.

[13:30]

Oscar: I have not delved into that yet. We went the route of a well for now, but eventually we'll have to be looking into stuff like that because we do get a lot of rain out here. Our irrigation plan that comes from the well we actually just implemented a fertigation system onto that, so we're pretty excited to give that a try too.

[13:50]

Billy: The way you apply that irrigation can help lower the risk so you know drip irrigation can help a lot, especially if the water is not touching that harvestable portion of the crop.

[14:01]

Oscar: You know, here's another think you don't think about. So, your utility vehicles having a free oil so you don't have oil leaks and stuff like that. I heard someone talk about food grade oils for the actual vehicles. That's something I learned during the workshop too that I was unaware of, like oh, interesting, but it makes sense.

[14:18]

Maggie: Meaning food grade oils and lubricants for any sort of machinery or equipment that you're using that food may come in contact with, correct?

[14:26]

Oscar: Right. Well, shortly after the workshop and I finally saved up a little to get the quick greens harvester by farmers friend and it does come with food grade safe oil too. So, that was really cool. That put all the blocks together. When I when I heard it over at that the workshop and then I saw that I was like, oh that's cool. Yeah, so we went to well route and I water tested. I got my testing done through a lab in Georgia. Everything checked out awesome. The only thing that wasn't good for us was the salinity level in our water side. So, we're having a look. Into some type of filtration system which most likely will be reverse osmosis. It's a narrow system for it. It's not a big deal for the crops this year but overtime that accumulates and it could cause lack of minerals for the for the plants. So, that's one of the main things that I'm looking into at the moment. Overhead is not a good idea when you have higher salts too, because it can cause an issue with burning of the leaf, but as far as like generic E. Coli and all that, we are OK. We already had an idea of what we wanted to do with our infrastructure for irrigation. We knew right away from my experience with the first plot that I was working on at that rental was drip all the way, especially out here for us. It gets so hot and there's more issues associated with overhead that it can open it up for more disease and stuff on the plants and burning of the leaves if it's not too late. So, we decided drip, definitely. We're playing around with a hybrid of implementing overhead for seedbeds. So, if we do need to have some overhead to keep the beds moist for the germination part of it we can do that and we're trying to make that portable so we can move it around. Also drip would also mitigate that issue with some higher salts. The wash pack was definitely something that was important for us. We kind of grew out of our kitchen. We can't be sustainable trying to do things in our kitchen, especially at scale. We realized that if we're going to do this, we're going to do it right. So, we looked into metal buildings. We looked into a bunch of different things, but metal buildings for us was just a little unfeasible for us at the moment, with all the investment that came with starting this new farm. So, we decided to go with a shed type building. What you see there in that picture. Basically, I told the guy hey listen, this is what I want. Obviously, I couldn't go too big for financial reasons. We had to keep it a 12 by 24-foot building. At the moment, I think it's just fine. It's perfect. Our walk-in cooler was the most important for us so that I made sure it was 8 by 12. We decided to go the route of washable walls, so we used FRP panels for that. Everything is spray foam insulation in between studs. So, we spray foamed, put the FRP's up for the ceiling and we painted it with a couple coats of paint. It's a white high gloss exterior based paint so that it can take any moisture or weather issues. For the flooring of the entire building, we are going with some vinyl sheeting floor because it's washable and then water sealant. So, we decided to go that route just to make things easier and there's a little cushion in it too, so it's nice for standing on. Some of the things

that we implemented in the wash pack was a stainless steel sink. That was super important to make sure people had access to water to wash their hands before they touch anything, or if they go to use the bathroom, come back hygiene, hygiene, hygiene. All our harvesting tools, if we do use any knives are sheathed, so it keeps them away from any type of contaminants. They are also cleaned and sanitized with soap and water and of course we do spray with sanitate too as well to make sure that it's protected in that aspect. For our micro greens too, actually some seeds we will use a diluted food grade hydrogen peroxide to sanitize the seeds at that point too. Not all of them require that, but there are certain ones that are more susceptible, like our sunflower seeds for instance, that we will do that with so that it mitigates any issues with mold. Here's some pictures of the pack house. You can kind of see the development. So, the ceilings been insulated, the floors been insulated, the panels were put up, and the flooring is next to the cooler is what we decided to because of our ability to customize the space to accommodate the size of cooler that we wanted. With the packaging we do have a harvest date. We do have how much it weighs. Because the microgreens aren't really block like the field are, it's a little more simplified on the label. We're still kind of working on that, and that's one of the things that I'm still learning about how to have that traceability on the field, so we're working towards that. Currently we're composting the microgreen soil that we have there and it will compost for a year. That way we can utilize it for certain things throughout the field. So that's a whole another topic that we're still trying to learn about too, so we're not even incorporating that into our garden yet. It's just it's such a waste to just let all that awesome, awesome carbon matter and also that plant matter just go to the dump. We clean out the trays and then we pressure wash every single tray to get all the heavy organic matter off of there if there's any, or solid debris. Then it does go into a tank that is diluted bleach water solution of 200 parts per million. It will sit in that tank for about 25 minutes to really sanitize that and kill off any if there's any remnants of anything. Then of course, we will let them stack dry off the floor, of course. So, the little thing next to the bleach bottle is a measuring strip that helps a lot because I had no idea what parts per million was. That was another thing, to answer your question from before Billy, that I learned while sitting in on that workshop. It is important is to have these tools to measure out these things.

[21:06]

Billy: Yeah, you don't want to over use it and lose and create other risks, and you don't want to under use it and create a food safety risk, yeah.

[21:15]

Oscar: Absolutely. Last but not least, is relationships. I know this has nothing to do with food safety, but in a way it does, because when you actually see the face of the people that you're working with, you realize how important it is to be food safe. Like I said before, it's not just you and your financial endeavors and your family, but it's everybody else too that you're feeding even other farmers. These farmers are going to be able to help you out along the way to guide you with their experiences. Some of these farms are already gap certified, and so you can definitely pick their brain a little bit, learn a little bit from them, see what they find is their best practices, what their hard points in being food safe are, and what their hurdles are. We all want to help each other. We all want each other would be successful, whether it's the chef at the restaurant or your seed supplier, he's going to want you to be successful. Of course, one farmer's gonna have a different experience than you are and so you can learn a lot just from opening up a conversation and just giving somebody a call saying hey, how you doing and if I can help you in any way I can, I'm here, just let me know.

[22:20]

Maggie: Thanks everyone, have a lovely Thursday.

[2:27]

Everyone: Thank you!

[22:30]

Thanks for listening to our produce safety Focus Group series. For visuals from the presentations, more information on this series, and other produce safety resources visit youngfarmers.org/focusgroups. This podcast was edited by Hannah Beal and recorded in partnership with the National Farmers Union Foundation over the summer of 2020 as part of our FSOP produce safety programming.

[music]
[23:04]

Transcribed by Mackenzie Jeter, National Farmers Union