

Episode 7: Delmarvalous Poultry

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Blake Moore:

My name is Blake Moore, natural resources and horticulture agent.

Dan Severson:

Hey, I'm Dan Severson, ag agent.

Jake Jones:

It's Jake Jones, Kent County ag agent.

Katie Young:

And I'm Katie Young, digital content specialist.

Blake Moore:

Welcome to Extension 302.

Jake Jones:

Welcome to Extension 302. On this episode, we'll lightly scratch the surface of the poultry industry on Delmarva. I'm Jake Jones, agriculture extension agent for Kent County. And joining me are of course Dan and Blake. Say hi guys. [crosstalk 00:00:39]. Our guest today is Georgie Cartanza, University of Delaware's poultry extension agent, whose office is located in Georgetown at the Carvel Center. She has statewide responsibility and vast experience working in the poultry industry and as a poultry grower herself, switching to organic chickens in 2015. Georgie was the first person in the United States to be selected as a participant in the Nuffield International Farming Scholars Program. And she joined UD in 2016. We're excited to have her on the show with us today to talk about the number one industry in Delaware. Hi, Georgie.

Georgie Cartanza:

Good afternoon. How are you today?

Jake Jones:

Good. Thanks for joining us. Did you want to add anything to your intro?

Georgie Cartanza:

No, I think that covers it pretty good.

Jake Jones:

Okay. So the first question is pretty big. How important is the poultry industry on Delmarva?

Georgie Cartanza:

Well, it's significantly important to Delmarva. It's actually one of the largest industries. And pretty much over a billion dollars comes from the poultry industry here on Delmarva. And a lot of times we talk about the industry as it's not just one state, it's multiple states, and so it's Delaware, Maryland, Virginia, and the Eastern shore of those two states. And so almost all the corn and soybeans that are grown here go to the poultry industry. So, it's important that it's also beneficial to our grain farmers, and they actually get a premium for their grain because of the close proximity to the end user. So at any given time, we have about 125 million chickens on the ground on Delmarva, and we grow almost 10% of all the chickens right here in this pretty small area relative to the rest of the country.

Georgie Cartanza:

And so some people say, "Well, why, why there? Why would you do that here?" And so about a third of the US population lives within eight hours of this area. And so that's one reason, when you're selling a fresh product, why this is a good location for producing that. These chickens are probably going to eat about a billion pounds, or excuse me, a billion dollars worth a feed a year. So that also has an economic impact. There's about 1300 growers that grow chickens here. And there's about 20,000 people employed by actual poultry companies. And what does that really mean to our community and to our state and the surrounding areas? Well, it means that every one person that's actually employed by the poultry industry, it creates seven jobs in the community. And I really like to share that because I think it's important that people understand how connected we are. And it's doctors, it's lawyers, it's accountants, it's the person working at Wawa and Walmart. So, it does have a huge impact, more so probably in the Sussex County and in the lower area of Maryland and Virginia, but it is tremendous.

Jake Jones:

Thank you.

Blake Moore:

So Georgie, one of the things that I can always remember ever since I was a kid is growing up, and the chicken industry and agriculture around here when we're spreading manure and everything like that, I always say that it smells like home, and it also smells like money. But this question is really what happens to all of the manure generated in this industry?

Georgie Cartanza:

I have to tell you, Frank Perdue would have told you that that is the smell of money. So, basically what happens to all the manure, and just to kind of give you an idea. In Delaware, there's about 320,000 tons of manure that's produced a year, and almost 100% of it goes as fertilizer. So it's used as a fertilizer for crops around here. And so when you think about something being local, it really is this full circle thing here that we have. So, we have eggs that are brought here that go to a hatchery that the eggs are hatched. Those chicks get placed on farms and are grown here. They're processed here. They're fed food from here. And then we have this by-product from these chickens, which ends up being a fertilizer. I mentioned that there's about 320,000 tons of manure produced in Delaware. And about 40,000 of that, 40,000 of those tons actually goes to the mushroom industry in Pennsylvania. So it's full circle. It becomes a fertilizer for plants and to provide them the nutrients they need.

Dan Severson:

Georgie, there's a couple of things I thought you forgot to mention in your intro, or Jake forgot. First of all, you're on here representing DHS, man, Dover High.

Georgie Cartanza:

Oh yes, absolutely. Class of '90.

Dan Severson:

Represent now. Because we're both DHS. And you also forgot to mention your alter ego that's on Facebook as the Poultry King.

Georgie Cartanza:

The Poultry King, yes. Yeah. Everybody deals with stress different. And so the anxiety of the time we're in and stuff like that, I like to sing dance and pretend I'm somebody else. Much of what I post, it's open to the public to see, and a lot of it has to do with poultry and what's going on in the poultry industry. It shares why do we do what we're doing in the chicken house, all different kinds of stuff like that.

Dan Severson:

I think they're outstanding. They just make me laugh.

Georgie Cartanza:

Ah, thank you. I may seem a little foolish, but if it brings a smile to your face, it's well worth it during these times.

Dan Severson:

That was the water in the water fountain at Dover High School. Everybody's a little foolish that come out of there. So, my question is I want to know how has the poultry industry changed over the years so that we're doing a better job taking care of the animals as far as raising them, their environment and their food. How's that progressed through the years?

Georgie Cartanza:

I've been in this industry for almost 30 years now. And I think about, just in that period of time, we've had some pretty tremendous changes that have really been to the benefit of the poultry themselves, but also to the grower as well. And so one of the number ones, one of the oldest ones I can think of is when we made the transition from open drinking systems to nipple drinkers. And what it did was it allowed us to give the birds a much more cleaner, safer drinking water. And it actually reduced the amount of mortality we would have on farms because the birds weren't being exposed to those bacteria and things like that. So that was a big game changer and probably improved livability by five to 8%, which was tremendous. The next one, and that was in the late '80s, early '90s. Then about the mid '90s onto the early 2000s, we made this big transition to what was called tunnel ventilation.

Georgie Cartanza:

And so that's where we can actually create a wind tunnel effect in the poultry house, that on a really hot day, we can make it feel 25 to 30 degrees cooler to those chickens than what the actual air temperature is. So that was another big technology changer. Prior to that coming along, if it was 95 degrees outside, it was 95 degrees in that chicken house. And we were very limited in what we could do to keep those birds comfortable and reduce the likelihood of them getting heat stressed, but also reduce the potential for mortality. So, that was another big game changer that again happened '95 on. And then also early on in the 2000s, we started adopting

really computerized technology that allowed us to create an environment. They were environmental controllers that gave us a much more consistent environment in the poultry house.

Georgie Cartanza:

So that was another big technology that was adopted. It not only changed the environment for the chickens, but it actually made it that a farmer could actually take care of more capacity. Because before, if you had 16 tunnel fans, you might've had 16 little thermostats that you were running around to each day to adjust that temperature. But what it did was it brought all those thermostats to one location. You could put in a program that said I want it to be this temperature day one, let's say 90, but by day 14, you want it to be 80. Everything incrementally changed relative to that, as long as you programmed it properly. So, that was another big game changer in terms of bird comfort and making it a better environment for the chickens. We've also adopted things like radiant heat, which is a more efficient heat.

Georgie Cartanza:

So that saves fuel. We've adopted LED light bulbs. That saves energy as far as electricity. I think you might've mentioned some things about the environment. Many farmers have put in what are called heavy use concrete pads that are at the entrances of the poultry house, but also at the manure storage buildings. And so what that does is it lessens the opportunity for a manure to get ground down into the ground. And so that way, when it rains, we don't get an infiltration into the groundwater. And so adopting those technologies have been a huge help. But then also, we've adopted vegetative buffers. So poultry farmers are pretty progressive in adopting technologies and really wanting to do things that help lessen their impact to the environment and help improve things.

Blake Moore:

On that note, can you elaborate on the, I think I've heard that you guys are doing a study on some of the pollinator buffers between chicken houses. Do you have any information on that? And I don't mean to put you on the spot, but I'm really interested in what you guys are doing there.

Georgie Cartanza:

Well, what we're doing is we're using some different types of wild flowers. Some people are using... I'm probably not as knowledgeable about it as I should be. But we are trying some different pollinator plots. And what's nice is it actually saves the farmer from having to mow. But it's also creating this environment so bees have these little pit stops. Bees can't fly for indefinite amount of time before they have a place to kind of regroup and do what they need to do as bees. So farmers are definitely interested because it beautifies things, saves them mowing, and then we're creating this environment that helps the bees. There are different types of mixes that are used, and Jim Passport is with DPI, and I've not become an expert in that because that's really something that's his forte. But farmers are very interested in it and trying to do something that really helps the bee population, but helps the environment.

Blake Moore:

Well, if you guys need extra hands to help there, I am very interested in helping out. So, let me know.

Dan Severson:

Yeah. We're lucky here in Delaware. We have a great poultry industry that we can all work with and work from. Georgie's well aware of the DPI and the programs that they got going on there, and the heavy use pads as far as getting cost shares, conservation, or NRCS. So yeah, I think we're in good shape.

Georgie Cartanza:

We are fortunate that we have programs like that that can help cost share, adopting some of those practices. And that really is a benefit because those are practices there and they help improve the environment, and they're helpful to the farmer.

Dan Severson:

Yeah. Who otherwise may not be able to afford to do something like that.

Blake Moore:

That's what I always say as well. If we're not paying more for our food, then we have to find programs to be able to help institute these programs. Because I mean, it can't just come out of the bottom line on-

Georgie Cartanza:

They're not something that is necessarily making money for the farmer. So it is, you have to kind of figure out, okay, how do you justify doing that? And not that the environment is not important, but it all has to work together so that it's sustainable as a whole.

Blake Moore:

Exactly. We're all in this together. For sure.

Jake Jones:

So Georgie, as we know, farming can be pretty stressful, and chicken farmers have a lot of financial stress, especially, and then mental stress because they're caring for thousands of birds. So how is coronavirus impacting the chicken farmers' livelihoods and in their lives? Is it stressing them more or is it pretty much a stable industry?

Georgie Cartanza:

Well, as far as this whole social distancing, poultry farmers in particular, because they're filed by our security, they're kind of used to being on their own and doing their own thing and not being maybe around a lot of people. But definitely one thing, there is certainly a lot of mental stress associated with this whole coronavirus thing. And it really comes from the fact that there are so many unknowns right now. There's unknowns as far as... I'll give you an example. Overnight, the poultry industry changed as far as supply and demand. So, normally 50% of the poultry would have went to grocery stores. They would have been packaged in one, two, three pound packages. And then you would have the other 50% would go to restaurants and to institutions. And they would take that product as 40 or 50 pound boxes.

Georgie Cartanza:

And so with a flip of a switch, basically, we went from there wasn't this demand in the restaurant arena, and now everybody wants it at the grocery store. Well, grocery stores don't want it in 40 or 50 pound packages. So, that really created instantaneously a real challenge. And so I know

when this first started, my birds were supposed to be moving, and I wasn't sure were my birds going to move because at that point they were having issues with getting enough staffing in the plants. And so that brings a lot of anxiety because you're almost at the finish line and you're just not sure if you're going to get across it. And so that brings a lot of extra stress and anxiety knowing when are the birds going to move, you know, how are the birds going to do. So you have that.

Georgie Cartanza:

Moving forward, we're not sure what the length of time will be between flocks. And so that brings some extra stress because ultimately if you don't have chickens in, you're not making money. And then also too, with the unknowns as far as even as things open back up, what will be the behavior of the consumer in terms of will all of the restaurants open back up? And even if they do, will patrons go back to them as they had previous to coronavirus? So that's the unknown, and that's big picture, is that how is this all going to impact supply and demand? And so that is really the anxiety for farmers in general. There are some farmers here in Delaware and Maryland that have been hit harder than others because some integrators have struggled more with getting birds moved to plants than others.

Georgie Cartanza:

And so that does come with some financial hardship in trying to figure out what to do with that. So, right now there's a lot of unknowns. Unfortunately, the poultry industry was not covered with some of the assistance programs that have been provided by the government, and actually they were left out completely. And so it's going to be interesting as to how we progress forward. So, it definitely is, it's a little stressful. I kind of liken this whole situation to this, is that the poultry companies are doing everything they can so that they don't have to depopulate birds. And so in some cases, we're trying to hold the birds back in their growth to buy ourselves some time. And so it's kind of like this, you're in the plane and you're circling the airport. You're burning fuel and you're waiting to land, and you hope you don't crash. So I think that's what every farmer feels like right now. Are they going to get to the plant? So, that's the worry.

Dan Severson:

Yeah. I just think that it's a big ship that you can't turn fast.

Georgie Cartanza:

No, no. And you don't retool. Let's say that now 75% of the demand is for tray pack to go to grocery stores. You don't retool a processing plant overnight. It's a long process, and it comes at tens of millions of dollars to do that. And we don't know. Is this a short term? Is this a long term? The unknown is probably... Sometimes if you just know something's going to suck, you can be like, this is going to suck and I can prepare myself for it. You don't even know what to prepare yourself for.

Dan Severson:

And I think a lot of people out there don't understand that farmers, all their product is pretty much consumer demand. The birds from the 1950s to the birds we have now are totally different because we've listened to what consumers wanted.

Georgie Cartanza:

Yeah, absolutely.

Dan Severson:

So everything we do is consumer driven.

Georgie Cartanza:

Yes. Yeah. They think it's something else is steering the ship, but the reality is consumers are driving the ship. And so for years, boneless, skinless breasts, that was the primary thing consumers wanted. And so we selected for chickens that had big breasts on them. And so they definitely do drive it, whether they realize it or not. From the size of the chicken to the product mix, it's all consumer driven. Because if you don't sell it, you're going to smell it.

Dan Severson:

Well, and I like that. And it just goes back to chicken wings. Man, back in the day, nobody wanted chicken wings. You could give them away. Now it's like chicken pauls and chicken wings, good luck.

Georgie Cartanza:

Yeah. Oh yeah. And chicken pauls actually are the most profitable part of the chicken for the integrator.

Blake Moore:

And speaking of chicken wings, I remember visiting a plant that did organic, and they said that even though the chicken wings are organic, they don't market it that way because there's no market for it. People eating wings don't care if they're organic or not.

Georgie Cartanza:

Yeah. There's definitely different niches as far as supply and demand go.

Jake Jones:

Have you ever had a chicken paul?

Georgie Cartanza:

I have not. I've held one, but I just haven't had a desire to consume one.

Jake Jones:

I kind of want to see what all the hype's about.

Blake Moore:

Jake, I had one in a soup.

Jake Jones:

Yeah. Was it good?

Blake Moore:

And I'm telling you, I stuck it in my mouth, and it just had that weird feel. And I'm like, I had [crosstalk 00:18:05].

Dan Severson:

Next episode, Jake's eating one. Truth or consequences.

Blake Moore:

So Georgie, you touched on this just a little bit in the last question, but are Delmarva poultry growers getting any relief in the coronavirus food assistance program?

Georgie Cartanza:

They are not. The poultry industry was left out of that completely. So, at this point in time, we're not. I got to be on a call earlier today that there's some proposals that hopefully I think there may be potentially one more stimulus package that comes out. And the chicken caucus, which is made up of three different senators, is hoping that they will be able to influence the outcome on the next stimulus package, that there will be some relief for the poultry industry and for poultry growers.

Dan Severson:

And for those out there, this is a program that is through the USDA, correct Georgie?

Georgie Cartanza:

Yes. Yeah. It is through the USDA. And I actually took some notes earlier today on that. So it is through USDA. And so Sonny Purdue, I know that that's the person that they've been trying to connect with and trying to explain what poultry needs to help it succeed and be okay throughout this. I'm trying to look back here.

Dan Severson:

So if we have poultry producers or people that want to support the poultry industry, is there somebody they can call, representatives or whatever, to voice their opinion?

Georgie Cartanza:

I would certainly reach out to Senator Coons, to Senator Carper. Those guys I think would be, Lisa Blunt Rochester, the representative. I think any of those, just saying, "Hey, we're here and we have a need." And again, for some growers, they may not have the need in the immediate. They may see that over the next month or two, just depending on how their flocks move and come back in. Because in some cases, these farmers are keeping the birds 10 extra days longer than they normally would. And depending on who you grow for, some of them are getting compensated for that additional time while others, it's just like, well, we kept the birds 10 extra days and there may not be really any additional money, but certainly there's the costs associated with growing those chickens, like the electric bill and things like that.

Dan Severson:

Yeah. So even if you're not a grower, if you want to support the poultry industry, reach out to who Georgie mentioned to-

Georgie Cartanza:

If they're supporting beef and pork and these other arenas, then I think that spread the love around. Don't forget about the chickens.

Dan Severson:

So, hopefully we're wrapping up with this COVID-19. Do you have any feelings or the outlook of what the poultry industry is going to be like post coronavirus? I mean, again, like you said, we've got these plants that are retooling, and then all of a sudden they're going to get hit back again and have to change again. So there's more tens of millions of dollars, and a bottleneck and what's going on. You have any feelings or anything you've heard?

Georgie Cartanza:

I think the PPE, as far as what they've done in the plants to try to protect the workers, I think that has been of the utmost important importance to the integrators to make sure that they keep their workers safe. When you put up plexiglass between workers, that takes up space that may potentially slow down production. So if a processing plant was able to process 400,000 a day, will that same processing plant post corona be able to do 400,000 a day? I don't know. I think again, you got to think about what is the world really going to look like? How long has this six foot of separation going to be? I think we just don't really know what that's going to look like.

Georgie Cartanza:

And then again, with these processing plants, how does the product mix, what is that going to be post corona? We don't know that either. I've heard the number thrown around that a third of restaurants won't reopen. Definitely that has an impact on product mix. So, I think the poultry industry will remain strong. I think this has definitely not been an easy time for them. There's been lessons learned and there's been some hiccups, but I think it'll continue to forge on. But it's a commodity, and so the margins aren't real big anyways. And so when you have a situation like this, it makes it that much more challenging.

Dan Severson:

Yeah. And farmers are some of the most optimistic people in the world, so they're going to keep plugging along.

Georgie Cartanza:

Yeah. They're going to keep plugging away at it, like you say, and every day is a new day.

Jake Jones:

So what are some of the most exciting projects you're working on right now?

Georgie Cartanza:

Well, I don't do a lot of research. Most of what I do is more of the outreach and education piece. And so one of the most exciting things that I get to do is work with growers who are struggling with performance. I love to work with them and look at their records and help them understand, okay, here's historically how we've done, and maybe here's what the issues are or repetitive issues maybe flock after flock, and try to really hone them in on what they can do to improve their performance and be more successful. And so that's my favorite part of the job is helping growers who've kind of gotten behind or are struggling, and see them kind of make a few changes, and then they go on long and they're successful and not lose their contract.

Georgie Cartanza:

The other thing that's one of my most favorite things is doing outreach with the general population and with young people in schools, and just helping them understand the importance of this industry to Delaware and to Delmarva, and that there are lots of job opportunities that they may not even think of, and just how interconnected we are, and really try to help them dispel some of the myths and misconceptions they have about the poultry industry. One thing you guys didn't ask me but I want to make sure everybody knows, and I always tell them if you don't learn anything from me I would want you to know this, is that no commercially grown chicken has any hormones or steroids given to it. They grow like they do just because of their genetic potential. But I like to say I'm blessed to have the opportunity to work in extension. And again, I love helping people and that's really what extension does.

Dan Severson:

I hear you. Yes, you're absolutely right. Yeah. It goes back to milk, meat, all that, no hormones, no antibiotics. Well, you can't put it on the shelf if it has that stuff in it.

Georgie Cartanza:

And unfortunately we've kind of done ourselves a disservice because the way things are marketed, we imply things. Because we put something on a package, we imply something about somebody else's product that may not necessarily be true.

Dan Severson:

So I think that's the main questions. I want to say kudos to the poultry industry because they've been doing a lot of truck sales and tractor trailer sales and helping out to disperse their product and help people that are having trouble getting meat. I mean, I saw pictures of the ones down at Harrington fairgrounds, and it was just insane. But kudos to the poultry industry for reaching out and getting that out to the public. I have one other question because I deal with this a lot being up in New Castle County, and it's always the spring of the year we get an up kick in, "What can I do to raise... I want some backyard chickens. What are the rules and regulations to having backyard chickens in Delaware?" I know that you're a commercial person, but when I talk to them, I think it'd be coming from our specialists might help them a little bit more.

Georgie Cartanza:

Well, the number one thing to do is, if you decide you're going to acquire birds for a backyard flock, is that you do need to register them with the Delaware Department Of Agriculture. And that's just so that they're aware that there are birds present there, and that's really about biosecurity and protecting the whole of all backyard flocks, but also the poultry industry that is here. So number one is to register their flock. And it's free. And you can go right to the Delaware Department Of Ag's website, and you go on there and you can register your flock. The other thing is to make sure you're complying with, if you live in a development, make sure there's no homeowner association rules that are going to be an issue. I live in Dover. In the city of Dover, you can actually have 25 chickens in the city of Dover. So just make sure that you're complying with those rules as well, because you don't want to get something, become attached to it and then not be able to keep it.

Dan Severson:

You have to have over an acre land to have 25 birds in Delaware?

Georgie Cartanza:

No, no, I think you can just 20 or 25 birds if you're in the city of Dover. So, one thing that I would, make sure that you've kind of educated yourself on what the needs of those birds are. So, if you've got baby chicks, they require a certain feed. They require a certain temperature. Make sure you're able to provide them the environment they need so that they can thrive and not be stressed. So, that's really the key thing is do you have shelter for them? They don't eat the same feed their whole lifespan. Make sure you've educated yourself about those things and that you're going to be able to provide them a good environment so that they can have a good life.

Dan Severson:

My rule here at home, if it crows, it goes. I don't need to be hearing that.

Blake Moore:

And that goes more than just chickens in the backyard, right? That includes other species as well, other birds?

Georgie Cartanza:

Yeah. So if you've got ducks or pheasants or anything like that and you're raising them, you should register them. And one thing that a lot of people may not realize that have a backyard flock is that if you were to have a bird that were to get sick, or let's say you had one pass away, and you wanted somebody to take a look at it, in Georgetown, there's Lasher Lab. And we provide to backyard flocks. They will actually test those birds to see what was wrong with them. And sometimes Dr. Battista will even do, if you come to the parking lot, he may do a little drive in visit to take a look at a bird for someone. They could test it and make sure it doesn't have avian influenza or horiza or LT. They can do some tests to see what's going on with the bird, but you would just want to make sure you call ahead because they want to not have cross traffic between backyard flock owners and commercial flock.

Dan Severson:

Yeah. So if you're interested in having backyard poultry, make sure you check out the state rules, check out your county rules, check out your town rules, check out your HOA rules because everybody controls somebody somehow.

Georgie Cartanza:

And it is for the greater good for all the animals.

Jake Jones:

Do you have any final thoughts you want to add, Georgie, or anything that we didn't cover that... I think you got... I mean, the hormones was a really good catch. I think we take that kind of thing for granted.

Dan Severson:

Yeah. Yeah. I think, Georgie, kudos for you picking that one up because yeah, we don't even think about that because it's just, we know.

Georgie Cartanza:

Right, right. And I think the other thing is that regardless of what the package says, all commercially grown chickens, when they go to the processing plant, are antibiotic free. So there are no antibiotics in those birds when they're processed. So, that's one thought. And just, Dan, being that you mentioned about how much the community sales for the chicken, I heard on a phone call this morning that [inaudible 00:30:12] did over two and a half million pounds of chicken at a dollar a pound of boneless breasts. And so they probably were maybe just, I don't even know that they were even recovering-

Dan Severson:

Yeah. I was going to say after they put in their time and effort, did they even make any money?

Georgie Cartanza:

I would doubt that, they may have broken even, if that. But it's better than having to take it to rendering where it isn't anything. Because the worst thing is to grow a product, you grow it, you process it and then if you can't do anything with it, that's even worse than you got to pay to get rid of it. So, those truckload sales are mutually beneficial to the community, but also at least the company say was recovering some of the costs associated with, and then I think maybe they even donated some of the money even from that. And I know they've donated a significant amount of poultry to the food bank and to first responders and things like that. So, yeah. So I totally agree. Hats off. It makes me proud to be a part of an industry that is, I believe they have done everything they possibly can to keep going and to also try to be helpful to those around them.

Dan Severson:

Yeah. I just hope coming out of this, the ag industry and the farmers start to be recognized as the rockstars that they are.

Georgie Cartanza:

I hope so as well, that people realize that it's not as easy as it looks to be a farmer. It's not just throwing some seeds in the ground and they grow and you can eat what comes up from it. It's much more than that.

Dan Severson:

Yeah. I agree.

Jake Jones:

With that, I'd like to say, thanks for joining us. I don't have any more questions. I think you did a great job covering the poultry industry. Once we figure out our audience a little more, we'll probably have you back on to either go more in depth or go even broader with it and start with basics.

Georgie Cartanza:

Well, I'm grateful for the opportunity.

Katie Young:

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University of Delaware or UD cooperative extension. We hope you've enjoyed today's episode and will come back for more. In the meantime, please subscribe, visit us online at udel.edu/extension, and join us on Facebook, Twitter, and Instagram at UDextension.

Blake Moore:

Yeah, we're very excited to have a certified superstar on here with us too. We're going to at least double listenership right now.

Katie Young:

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