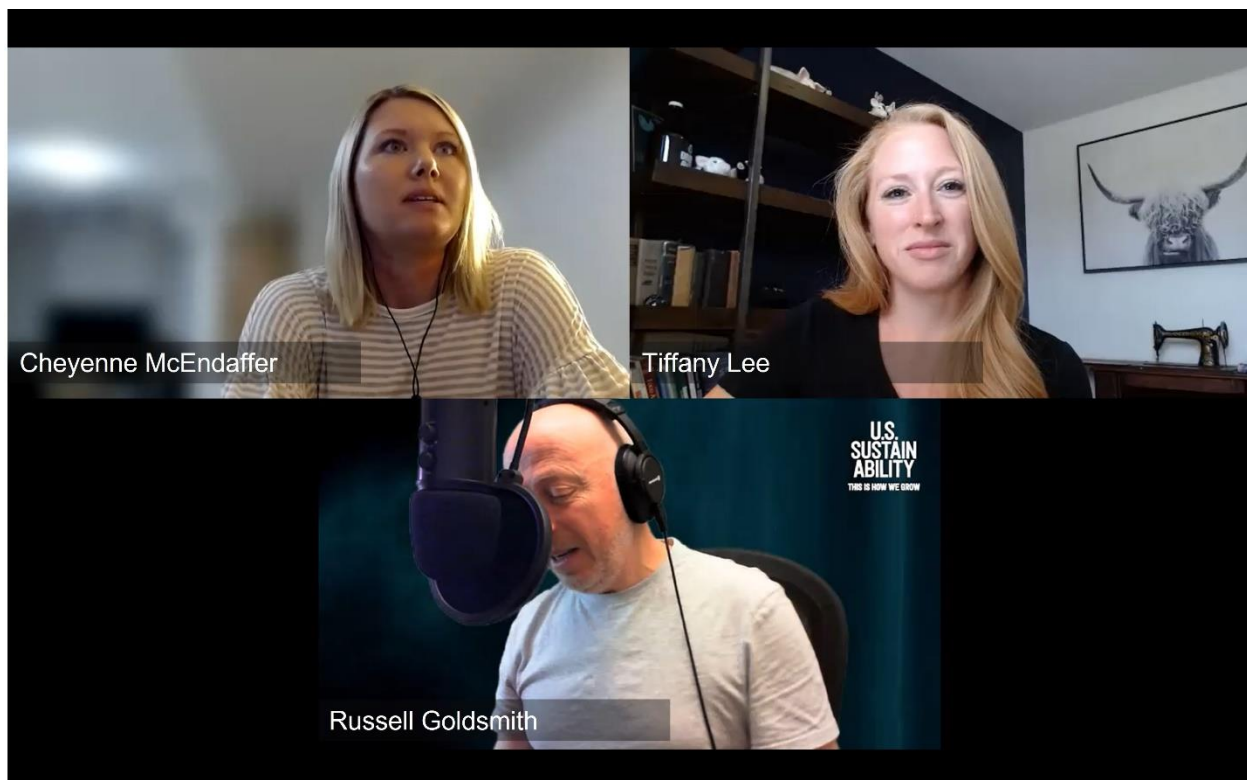




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In the second episode of 'This is U.S. Sustainability', from the [U.S. Sustainability Alliance](#) (USSA), we lifted the lid on animal welfare stateside.

To open the episode, host Russell Goldsmith was joined online from Denver, Colorado, by [Cheyenne McEndaffer](#), Director, Export Services and Access at the [U.S. Meat Export Federation](#), and from Leavenworth, Kansas, by [Tiffany Lee](#), Director, Animal Care and Compliance at [Clemens Food Group](#).



About the U.S. Meat Export Federation

Cheyenne explained that the U.S. Meat Export Federation, USMEF, is a trade association that promotes U.S. red meat globally. They primarily focus on beef, pork, and lamb and do a little work with bison as well. They have two functions, the first of which is marketing. They work with their international staff through 18 international offices to figure out the best way to put meat on consumers' tables in those markets. The second function is market access and exporter services.



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Cheyenne's role is on the market access exporter services side. She has a technical background, having grown up in a slaughter plant. Her family has been running a small one in the southwestern U.S. since she was seven, and it continues to operate today. She studied meat science at university and worked as a food safety animal welfare auditor for a few years before joining USMEF. That means that she's familiar with what happens within their plants, and she uses that to work with the [U.S. Department of Agriculture \(USDA\)](#), on various market access issues. USMEF also track the various export requirements for the 80 plus countries that they ship to and help communicate that back to their exporters to make sure they know what to do to export to these countries. And then finally, she also facilitates any trade issues they run into, like a stuck shipment at a foreign port of entry.

About Clemens Food Group

Tiffany explained that Clemens Food Group is a pork production company with two pork slaughter plants, one in Pennsylvania where their headquarters are located and one in Coldwater, Michigan. They also have a vertically integrated hog supply maintained by Country View family farms. They have farms in Pennsylvania, Indiana and North Carolina and a few other states and they also partner with outside suppliers in states like Ohio, Indiana, Michigan to maintain their hog supply. Tiffany is Director of animal care and compliance. Tiffany grew up on a farm in Leavenworth, Kansas and is a veterinarian by training. She practiced for a little while before coming back to the ag industry where she enjoys working with producers and the slaughter facilities to ensure that they provide the best, most wholesome product and that those hogs are raised within their strict animal welfare standards.

Standards

Cheyenne said that USMEF's approach to animal welfare is commercial standards on top of regulation.

On the slaughter plant side, they have regulatory enforcement by the [USDA Food Safety and Inspection Service](#), FSIS. FSIS is their food safety authority for red meat and other products produced in the U.S. The [Humane Methods of Slaughter Act](#) gives FSIS oversight to ensure proper treatment and humane handling of livestock in their USDA-inspected slaughter plants. And if they see something out of line, they can shut down a plant immediately. However, most of their medium-to-large slaughter plants go well beyond those regulations by following robust commercial standards required by major food service and retail operators in the U.S. These standards define very specific metrics for evaluating core criteria like falls, vocalization, stunning, effectiveness, etc. By complying with these standards that go above and beyond the regulations. These plants agree to an annual third-party audit, they perform daily and/or



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weekly internal audits to the criteria. And some even have third party companies watching live animal areas while they're operating, which they call unbiased auditing, when people don't know that they're being looked at. All of this combines to make their slaughter plant and welfare outcomes, employee practices, facilities and plants really some of the best that you'll see in the world. But assessing this criterion can be confusing, especially if someone is new to the auditing or slaughter process. For example, 'is an animal vocalizing because it's in pain or experiencing fear or is it just a steer talking to another steer?' That's why they have an organization in the U.S. called the [Professional Animal Auditor Certification Organization](#), PAACO. By getting PAACO certified, you're trained to learn how to assess these very specific criteria and that gives plants comfort in knowing that they'll get a third-party auditor who knows what they're looking at, but also who is not going to impede the slaughter process or distract the animals in any way. Many plants also send their employees that work in live animal areas of the plant to get certified, too. So, it's a really great tool to build consistent evaluators and employee operators within their industry but now they're expanding to other countries and doing global trainings as well.

On the farm side, Cheyenne said that when they talk about beef and pork, they have two producer-written commercial programs, the first of which is called the Pork Quality Assurance plus or PQA plus program, for pork farmers. And then on the beef side, they have BQA or Beef Quality Assurance. They're a little bit different in how they're written, as well as how the sites are assessed. But fundamentally, they have very strong animal welfare components and also cover other things like responsible antimicrobial use, employee safety, environmental considerations, etc. About 86% of the pork produced in the U.S. comes from PQA Plus site assessed farms and about 85% of beef produced in the U.S. comes from BQA certified farmers and ranchers. Therefore, the vast majority of meat they produce for both domestic and export markets come from certified operators or operations.

Cheyenne explained that there could be a number of reasons that not all farmers and ranchers take part in the program. Some slaughter plants require animals to come from a PQA Plus farm. Farmers and ranchers that are part of producer associations may participate in a live training at a local, state, or national meeting that they attend. But for the producers that aren't certified, she wouldn't say they're not raising their animals in the right way and she's sure they're actually doing an excellent job. This training just may not have come across their desk or, like most ag people, they may have 130 cattle on top of their day jobs as well.



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So, it's just maybe something that they haven't taken the time to do online or go to an in-person training. On the beef side, the average herd size in the U.S. is about 50 head. They have thousands of operators to reach with these trainings. So, she thinks the fact that a vast majority of beef and pork in the U.S. comes from certified farms or operators is really amazing and goes to show the U.S. focus on continuous improvement through commercial programs versus heavy arm twisting with overregulation and doing it because someone made them do it.

What Tiffany would like to see and what they strive to do at Clemens is implement science-based animal welfare standards and animal welfare standards that farmers understand and are able to implement because they're the right thing to do. They also have certain programs that are for customers, and they offer customer solutions to any kind of consumer needs or wants that may arise. But really, their standards are based in science and how the pig is cared for.

Tiffany monitors and maintains the standards, starting with the first conversations with hog suppliers. They require all hog suppliers for their company to be PQA Plus certified. They also audit their own farms frequently and do internal audits, sometimes four times a year. Outside suppliers are also required to audit themselves and to provide the results of third-party audits. They also know by checking on farm what's happening both on their farms and on outside supplier farms. It's her expectation to be able to go to a farm any time day or night and show up and have their expectations met at any time, not just through the audit process. She thinks having those expectations really goes a long way with their suppliers because it helps them build that relationship. They understand what they would like to see. They understand how pork production works. And so, she thinks it creates a good partnership.

If their standards aren't being met, Tiffany said they usually try to work with a producer to correct whatever has gone wrong or is happening. Most of the time, if something doesn't meet their standards, it's not immediate that they cut ties with a producer. They try to work with them, they have that relationship with them, and they want to maintain it. But if it gets to a point where they've decided that it's just not working and the standards are consistently not being met, they may choose to not do business with that particular producer. They are always open to re-establishing relationships, but they want to make sure that their standards are met first and foremost because they want to make sure the pigs are well cared for and healthy so that they can produce healthy, safe, wholesome food for their customers.



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Tiffany said that there are a number of ways that you can see if standards are not being met. If she visits, maybe unannounced, and pens are dirty or pigs are dirty, or they have some health issues that may not have been identified before. Those are some red flags. Consistently scoring low on audits, that's definitely another red flag. And if maintaining that relationship with the producer isn't a two-way street, sometimes they will prompt some conversations to maybe see what they're missing or see if something's going on with the production site that they may not know of. A lot of times it will be multifactorial. And a lot of times, they try to work with producers to continually improve. But there are some times where you just see too many red flags. And at that point, you have to have a hard discussion on whether to cut ties or try to continue to improve.

U.S. vs UK and European approach

Cheyenne believes the US and the UK & Europe have different approaches but both result in some of the most robust animal welfare practices in the world and therefore she doesn't think one is better than the other. She said that you see very heavy regulation dictated by legislators in the EU versus in the U.S., where you tend to see commercial standards written by producers and operators, driven by both the market and their desire to continually improve their practices. They do have regulatory oversight at their plants under the Humane Slaughter Act, parts of which were written over a hundred years ago. So, animal care is nothing new to the U.S. by any means but add to that the very tough commercial standards that their plants have to comply with, to sell to these major food service and retail accounts, and you get some of the most robust and strictest animal welfare practices in the world, in her opinion. But again, because these are standards and not legislation, she doesn't believe they get credit for them, even though they end up with similar or even better outcomes than over-regulated countries. She explained that she was a third-party slaughter plant animal welfare auditor for two years before she started working for USMEF and so takes that auditor eye with her all around the world. She's seen plants in major meat producing countries around the globe. And she's seen first-hand that practices in the U.S. are, in her opinion, the best, once you add their combination of that regulation on top of these very robust third party and commercial standards.

Tiffany echoed what Cheyenne said. She works with farmers all the time and grew up on a farm – her dad still farms. She said that a lot of times when you try to legislate something or put something into regulations, these farmers are a little bristly about it and she thinks, maybe rightfully so. That's

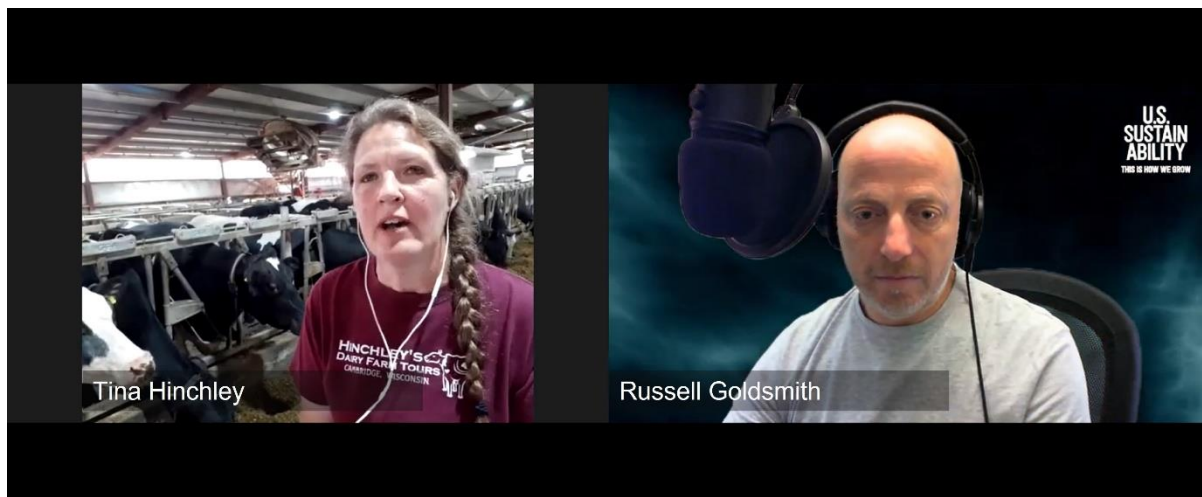


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because they're the farmers, they're the ones who actually know how to raise the animals, what good management practices are, and that good management leads to good animal welfare. She thinks it's just a different attitude maybe in the United States. She really enjoys working with farmers and having them help create their standards, because they're really the ones who know the animals and how animals respond and what makes a good caretaker out of a person and basically good healthy animals.

Tina Hinchley Interview: introduction

Tina Hinchley is a dairy farmer from Cambridge, Wisconsin.



She is milking about two hundred and forty head on her farm but is also farming about twenty-three hundred acres, which is about a thousand hectares. They use about four hundred acres or one hundred and sixty hectares to feed their cattle. The crops that they are growing beyond the dairy cow feed are corn, soybeans - the corn goes to the ethanol plant and the soybeans are sold to the local cooperative and then they grow some winter wheat as a cover crop.

Tina joined the podcast from inside her new barn that was completed in 2018. It is the size of a United States football field. Inside their dairy cows are in an amazing environment. They have fans to cool them down and waterbed mattresses. They are milked 24/7 with a robotic system, [Lely Robots](#), that is developed in the Netherlands.



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Tina said she sees a physical difference in the cows based on the environment she has set up for them. Now that the cows can go through the robot as often as they like, up to six times a day, she recognizes that when they were just milking twice a day, they were holding them back. Now that they're able to relieve themselves from the pressure of the milk, they're more comfortable, they can get up and eat when they want and they're social animals. If one gets up and wants to go to the robot, they're all going to follow her. Tina said it is the best possible environment that they could have afforded for the animals.

The set-up also helps with swollen udders. Tina explained that they have reduced the number of infections that the cows have simply by being able to milk them more often. And with the waterbed mattresses, there are recycled pallets and so there's a little bit of wood shaving fluff on top and that's helping them if they leak a little bit of milk. Also, with a robot system, they can identify which cows are starting to get an infection before it actually happens. So, the conductivity report identifies which cows need to be focused on.

Tina also has misters so that when the index on the humidity gets to a point outside, which is also being checked in the barn, the misters will turn on automatically. They mist for a little bit just to cool the cows down. One of the health issues in cattle in the hot summer is heat. Just like us, when we have heat stroke, cows can have heat stroke, too. So, it's very, very hard for them to deal with heat so the misters will come on for a little bit, cool the air down, which is beneficial. She also has Luna brushes and explained that since the cows have such a long body, there are certain parts of their body that they can't itch. They're not like a dog where they can reach their tail head. So, the Luna brushes can go underneath them and as soon as they touch it, it spins and itches those spots that they can't. Also, with the waterbed mattresses, as the cows are ruminating for 10 hours a day, the waterbeds are actually cupped up around them. And as they're ruminating, their body is rocking. And with that, it is not rubbing on their hocks, the lower part of their leg.

Tina also talked about the slats that the cows stand on. The value of manure is so important to farmers that they are going to store it. The cows are eating about a hundred pounds of food a day, which is about forty-five kilograms. What goes in is going to come out so that forty-five kilograms is going to end up coming out and being stored underneath the floor, which is 12 feet. It's stored until the end of November after they have harvested their crops. She said the nitrogen is super valuable and they make sure it gets to where it needs to go, all of which is done with the help of GPS and technology.



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Sustainability

Tina said that for her, sustainability is on three different levels:

- 1) **Environment.** In the spring when they are planting, they already have the GPS coordinates from the following crop in the computer in the tractor. The tool that they are using on the planter is called precision planting. The seeds are put into the ground with the planter, also in line is going to be a dry fertilizer. If that area of the field does not need it, that computer is going to stop it. So, they don't over fertilize. But also, it's a cost saving measure. The same happens when they are harvesting in the fall, the computer on the combine has a yield monitor and it's color coded. So, wherever the soil or the cornfield is red, that means that there's low yield and that would probably mean that the soil is out of condition. In Wisconsin it is not so much rolling hills, it's very much flat. But they still have soil erosion when they have heavy rains. Tina said that when the storms come through and you're getting several inches of rain really fast, the fields are just enough on a slope that it will end up having a wash out. And in those wash out areas, they have conservation strips with special grass. Sometimes they'll put wildflowers in there, too, but it has to be maintained. She said that a lot of times when you see photos of American fields, you'll see those strips in there. Sometimes they're dividing the different crops. But when you're on a big slope out west, they can do corn, alfalfa corn, and that alfalfa will hold the soil, so it doesn't run down into the creeks or the streams. Alfalfa is a cover crop, but it is also a perennial. So, it will be there for four years with their conservation strips, plus they are going to end up having a perennial grass in there.
- 2) **Community.** Tina said they have to be sustainable in their community. They have to be good neighbors and make sure that they know what they're doing. By hosting farm tours, which she's done for over twenty-five years, she is letting people come in to see their farm, to see what they are doing and just inviting people in to be transparent and let them know they have nothing to hide. She said that everything that they are doing there is the best thing for her animals and by being able to share what they do is an eye-opening experience for many of these people. When they go to the dairy store or the dairy department in their grocery store, they're going to see her face and they're going to see her cows. And maybe instead of just buying one gallon of milk, they'll buy two. Maybe they'll eat two scoops of ice cream. So, encouraging people to enjoy and embrace the dairy that their cows are producing is very important to them.



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- 3) **Economic.** Tina said that it's a tough time right now for people in dairy and Covid was really stressful when the cows were continually producing milk and the companies or the co-ops that they ship milk to are full. Sometimes farmers have to either let cows go or dispose of their milk. So Covid hit them pretty hard. However, she thinks that as Covid was taking place, many people embraced the fact that dairy is comfort food, and she knows that in the United States and in Wisconsin in particular, more people use real butter cooking, sour cream, cottage cheese and of course, ice cream is always good comfort food.

Tina said that to be sustainable they have to diversify and purchase more crop land to be able to make sure that they can be profitable every year.

Educating consumers about the reality of U.S. farming

Tina doesn't think enough is done generally to educate people from outside the farming community. In the United States, less than one percent of the population are dairy farmers, people in agriculture are two percent. People do not identify with where their food is coming from and it's very easy for them to criticize. She said that many times, when they have visitors on her farm, a lot of them see these great big farms and they don't understand that in Wisconsin, ninety seven percent are family owned and operated. Some of the farms are very big. So, they are employing other people that are supporting their own families off of these amazing animals. Tina added that the cows are the hardest working creatures she knows.

Healthy cows produce a lot of milk, but there's a lot of high-pressure marketing that goes on, such as on the dairy packaging that is meant to encourage people to spend more money on products. For example, a lot of people think that their milk has antibiotics in it. She said another good, amazing fact that is crazy to her is that in the United States they can say that the chicken you purchase from the grocery store is hormone free. But she explained that chickens have never, ever had hormones added. Is it false that they're hormone free? No, it's not false, it's true, but it's very misleading. And unfortunately, there's a lot of people that are financially strapped, and for them to have to decide when they go to the grocery store on buying an eight-dollar chicken versus a three-dollar chicken, a lot of times that's very, very difficult. So, we need to make sure that everybody understands, Tina said. It's so important that people know that every time a calf is born, all of her cows have to have a calf every year, somebody, Tina, her daughter, one of their school helpers, every single calf is being held or fed with a bottle that is handheld.



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Every single calf needs to have colostrum and human beings, farmers are doing that, and when they're doing that, they are bonding with that calf. And that's a relationship that starts from the moment it's born all the way through its whole milking life. And this is it, these cows know who they are. They trust them. She trusts them. And it's an amazing relationship. Also, if only people realized how much goes into an animal financially as well. By the time their little baby calf is two years old and she's had her first calf, they've invested two thousand dollars in each one of their animals, so it's not something that they don't care about. She added that often people will say, 'well, aren't you sad when you have to sell them and they have to go'? And really, it is hard, but at the same time, Tina knows that each one of these dairy cows needs to be a high-quality beef product in the end. So, they have to be healthy, drug free and mobile. And then they are going to get marketed and become lean ground beef, a leather jacket, pharmaceuticals. Animal by-products are in our shampoo and our conditioner and even in our sugar. So, when she explains this to people, a lot of times they're shocked, but then they realize that everything has to be taken care of and that they are going to be a purposeful animal that is going to be a good quality product.

Other Technology

Tina said that they also have cameras monitoring their cows, which all goes to her cell phone. Also, their breeder has the ability to see what's going on their farm and their nutritionist can also look into it. There's an SCR collar on the cow which monitors her rumination - as they are eating, which they do for 10 hours a day. That jaw movement of them chewing triggers the monitor and it makes a positive on their graph for each cow when they put it on. They don't have any bulls on the farm, so all of the cows are artificially inseminated. So, to be able to identify when a cow is ovulating, the collars are the trick. Tina explained that science and technology and studies have shown that before a cow ovulates, her graph is going to drop because she's going to stop ruminating or slowly go down, but her activity is going to go up. So, her normal graph with the high rumination is going to drop down and her activity is going to increase because, just like dogs and cats, they're going to start mounting each other and that up and down activity is going to trigger that. And then they know that's the day for her to be inseminated. She said that Wisconsin is not only famous for cheese, but also for semen! They have the most elite sire farms in the world.



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Final thoughts

Tina said that she wants listeners to know that every dairy farmer is a hardworking individual that cares passionately about their animals, the land, and everything that's happening on their farm. They have to be because this is their future - not only the future of their family, but the future of agriculture is food for everybody. And that means exports. That means everything going around. Farmers feed the world and they love what we do. For more information, visit dairyfarmtours.com or contact tina@dairyfarmtours.com

Cheyenne (USMEF) said that the U.S. story on sustainability is technology, innovation, and productivity. She feels they get a bad rap, but that productivity and that efficiency really make them the most sustainable for a lot of the food products that they grow or raise. If you look at the beef side, they have the least emissions-intensive beef in the world, and that's because of their grain finishing model and very high-quality genetics. On the beef and pork side, not only on the environmental side, but when they talk about sustainability, they really try and emphasize both the social and economic pillars as well. Cheyenne lives in the Great Plains of America in northeastern Colorado. She said that there are many parts of the U.S., especially out there, where you just cannot raise crops. And the only way that those communities continue to thrive today is because of cattle. There's sheep and some bison as well, but cattle being the predominant ruminant found on the plains today. So, when we talk about rural America thriving, it's really because of livestock. So, USMEF continue to promote that as well as benefits of having protein on your plate.

Tiffany (Clemens) said that her company is over 100 years old and one of its core values is stewardship, which she thinks really goes right along with sustainability, if not being the same thing. The reason that the business has been sustainable is because it sets such high standards, not just for animal welfare, but for everything that it touches, which includes the environment, the community, or their producer partners. They make sure that they're able to pass everything on to the next generation, whether that's farming practices, their business practices, or their natural resources. She thinks that is what has helped Clemens really survive and thrive throughout the last century. So, sustainability is not, like, a trend or just about the environment. It's about the community that you work in. It's about the people that you work with. And she thinks that as long as we remember that in the future, our agricultural practices will remain sustainable.