Addie Stone (#21)
TALL XVII
Session 2 – Texas Panhandle
October 17 – 21, 2022

Session 2 in the Panhandle contained lots of bus time, which meant plenty of opportunities to get to know our cohort better and reflect on our experiences. One of the questions from our interview was "where do you like to sit on the bus?" This second session lent itself to uncovering how others might have answered. There were some members of the cohort that trended toward the front every day and others that were dedicated to the back. There were a handful like me who preferred somewhere in the middle, depending on the circumstances. I suppose this confirms Dr. Jim's theory that a group with different bus preferences is likely to be well rounded.

The session really began when Jennifer and I met Ryan at the TNLA offices in Cedar Park and embarked on the 6-hour drive in my car. After realizing that many small-town restaurants are closed on Mondays, we found ourselves at a little gem of a diner called the Owl in Coleman. I'm grateful that I was able to drive with Jennifer and Ryan because not only did the company make the time pass much faster, but we also had the opportunity to chat about the upcoming legislative session. Since I've only been through one legislative session (and a very atypical one at that), I appreciated the insight they were able to provide.

Dan and Linda Taylor graciously hosted us that first night in Lubbock. While showing us his collection of cotton ginning equipment and memorabilia, I noticed a Queensland Cotton hat up on his wall. This brought back very fond memories of the summer that I interned for them in Australia, and I loved that I had found a personal connection to one of his artifacts. The evening finished with a genuine chuck wagon dinner and a few presentations. The speech by Mr. Coleman of the High Plains Water Conservation District introduced a theme that would recur often throughout our week in the panhandle: the area is running out of water, but there isn't a consensus on what to do about it.

If on Monday I had found a connection to my summer in Australia, on Tuesday I felt like I was reliving it! Cotton, cotton, and more cotton was the subject of the day. We first visited the Farmers Cooperative Compress where I had the pleasure of meeting my host for dinner that night, Mr. Wanjura. At FCC, we learned (and I became reacquainted with) the cotton warehousing process. The cooperative perspective on how they deliver value for their farmers impressed me. Next, we headed to Heinrich Farms where we learned about and saw the value of drip irrigation. It struck me how similar the high plains and rural New South Wales are to one another in their partiality to cotton and their lack of water. Our last cotton stop of the day was the USDA cotton classing office. I loved the artistic touches inside the building, like floor designs meant to represent center pivots, and I was surprised by the level of automation in the classing process.

Our afternoon consisted of a tour of the National Ranching Heritage Center and speakers from different commodity groups. When people think of Texas, they often think of cowboys and cattle from old Western movies, but our tour of the museum illuminated the truth behind those stories more than any Texas history textbook could. The evening began with the Lubbock TALL Alumni reception, where our group took a mandatory picture with some stuffed mules for a reason unclear to us that was explained by Dr. Jim as “tradition.” I am very grateful to the Wanjuras and the Piercys for serving as my hosts for dinner. I certainly think our view of the Texas Tech stadium was the coolest out of anyone’s for the night, and our group found many topics to connect on which made the dinner exceptionally enjoyable.

Wednesday seemed to be a day of logistics. We started our morning at the Muleshoe Animal Clinic and Vet Supply where we learned about the financial considerations of running a rural vet practice and acting as one of the only vet supply providers in the area. It was obvious that they provide a tremendous service to the surrounding community and industry. While at the clinic, I picked up some rubber bands from the store shelves out of curiosity. Turns out they were castration bands which greatly surprised me! I proceeded to have a hilarious yet informative conversation with my roommate Kodie about whether banding or cutting was the better method of castration for cattle. Thomas heard our lively conversation, inquired what the subject was, and immediately regretted asking, which made it all the funnier!

At Bamert Seed, we learned about the process of producing native grass seed. Safe to say, it's very tedious. It was interesting to me that the company mostly sells to institutional buyers and not to the retail market. I would think that with few competitors and growing interest in native landscaping for yards, the retail market could be very lucrative. After Bamert Seed, we departed for Burch Family Vineyards. It's been exciting to watch the Texas wine industry grow so much over the past ten years. Since I live in Austin, I'm very close to Fredericksburg and enjoy visiting the wineries there. Considering Fredericksburg is not where most of the grape production occurs, I'm glad I now have the full picture from vine to wine.

We finished our visits with the Sweetbran facility, where I saw the most impressive piece of machinery I've ever seen. When the rail cars come with the ingredients, they lock into a mechanism that rotates the cars 180 degrees one at a time to dump out all the ingredients. Not only do they have a machine powerful enough to turn a rail car completely upside down, but they are also able to do it while the rail car is still attached to the rest of the train! I was stunned. Our day finished out with a drive to the American Quarter Horse Association in Amarillo, during which I gleefully played "Amarillo by Morning" through the bus Bluetooth speakers.

Thursday started bright and early with a tour of the Caviness Meat Packing plant. I had never toured a slaughter facility before, and while I understood that it was an essential part of the process of providing people with food, I wasn't sure how I would react when face to face with killing on such a large scale. I won't say it was the easiest thing to see; I had to take a few moments to adjust to the temperatures, sights, smells, and sounds of the facility. However, by the end, I felt that I had taken an important step in fully comprehending how my favorite food is made available for me. I was thoroughly impressed with how Caviness treats their employees, and I also found it exciting to see a facility designed by Temple Grandin, who I admire. Afterward, we toured Champion Feeders and Micro Technologies, both of which are also important components of the livestock industry.

Possibly one of the most fascinating stops of the trip was our visit to Timber Creek Vet Clinic. When we arrived, I was immediately excited by the foals as I have always loved horses. Little did I know that these foals were unlike any I had encountered before. We met Dr. Gregg

Veneklasen, who I think would happily describe himself as a bit of a mad scientist, and he explained to us that his vet practice was one of the top animal cloning facilities in the world. I was both stunned and fascinated. We saw foals that were genetically identical to champion bucking horses. While Dr. Veneklasen explained that epigenetics could make their appearance or personalities different, it was fascinating to see how many of the horses retained the reputed demeanors, mannerisms, and skills of their genetic parent.

Thursday ended with a reception at the Amarillo Country Club and another host dinner. I enjoyed hearing from Mayor Ginger Nelson because her pride and vision for the city of Amarillo was obvious. I was pleased to find out that Jennifer, Darrell, Dr. Jim, and I would be having dinner with the Texas Cattle Feeders Association, and I was even more pleased when they told me that the dinner would be home-grilled steaks at their office. After a week of non-stop activity, it was very refreshing to slow things down in a more casual setting. I enjoyed our conversation about all the aspects of the cattle industry that we'd seen during our trip and current economic drivers creating challenges and opportunities.

I found the last day of our session the most engrossing. First, we visited the Texas Tech Vet Center. I was honestly stunned with the caliber of the facilities. When I was growing up, I wanted to be a vet, and if I had seen the Texas Tech Vet Center when I was little, I may have continued on that path. I admire the philosophy of the school where it comes to attracting students that are likely to practice in a rural area. Though in an early stage, I believe there is tremendous opportunity for a complimentary relationship between the Texas Tech and A&M Vet Schools that could greatly advance veterinary medicine in our state.

The last stop on our whirlwind tour of the west was the West Texas A&M Meat Science Center. We had brief presentations by the Texas Wheat Producers, the VERO Program, and the Department Head of the College of Agriculture and Natural Sciences. We were then introduced to Dr. Ty Lawrence, one of the top meat science experts in the world, and taken on a taste bud tour of various "fake meats." Thus far, I had intentionally avoided meat substitutes. I love jackfruit tacos and tofu in my stir fry, but neither of those have been engineered to mimic something they are not. I found no compelling argument to purchase and consume something that was highly

processed when the perfectly healthy, tastier, single ingredient substitute was equally as accessible to me.

However, since the “fake” meats were quite literally put on a plate in front of me, I was happy to test my conviction. I was not nearly as harsh as many of my peers on my ratings of the fake meat. Most I would not willingly eat again, but I thought the taste and texture of the black bean burger and Impossible Burger to be relatively on par with the piece of ground beef we were served. Would I eat them if a vegetarian friend served them to me? Sure. Would I buy them in place of beef? Still no chance.

After our taste testing, we got a brief tour of the Meat Science Center’s slaughter facility. After having toured Caviness’ facility, I was a little less nervous about how I would react and could better observe the process. I appreciated how their facility was obviously built for observing and learning. I think it would be a great way for people apprehensive about the slaughtering process to gain a better understanding of its effectiveness, efficiency, and humaneness. One bonus from visiting WTAMU was getting some awesome swag from the University. I picked out a black ball cap with a simple white embroidered bison on the front and WTAMU College of Agriculture and Natural Sciences on the side. In the two weeks I’ve had it, I’ve already worn it multiple times and taken it to South Africa with me. I think I can consider myself a proud WTAMU fan now!

Our trip concluded with Ryan and I driving 6 hours back to Austin, which thankfully only felt like 3.5 since conversation flowed easily between us. I continue to be grateful that TALL lends itself to building great relationships. I’m looking forward to welcoming everyone to my city when we reconvene in Austin in January.

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TALL XVIII Narrative; Lubbock/Amarillo

Please allow me to start by expressing just how privileged I feel to be a part of this program. I have been fortunate to be a part of a few official networks and groups over the years in the public and private spheres. There is no doubt TALL is as impressive if not more so than any similar group I have ever been a part of. From the networking, the education, and the exposure; this experience in invaluable. Both for my business and for me personally, I am already reaping the benefits of this experience.

To give just one example; The Collin Street Bakery survives on exposure to the public around the Holiday's. Folks choosing Collin Street for their Holiday gift giving for their family, clients, co-workers etc. is paramount to our success as a rural Texas business. As such, during our Amarillo trip I met a TALL alumnus named Jaclyn and her husband. She works with the Texas & Southwestern Cattle Raisers Association; a fantastic organization. She recommended Collin Street be connected with their team at Cattlemen's Magazine, TSCR's lifestyle publication. She thought we should be included in their magazine's Holiday gift guide. As a result, Collin Street will be featured in this publication stretching to 19,000 households statewide just in time for the Holidays.

This level of exposure for our family's small-town business is a home run for us. This would not have happened without TALL and is just one single example of the benefits felt being a part of this co-hort. And with that, let's recap our trip.

Monday 10/17

Monday was a travel day by in large and began in the evening at the Taylor's home. Dan Taylor and is wife are renowned for their lifelong accomplishments in the cotton gin business. They are beloved and respected high in low in the industry and their community. They were so nice to host us at their beautiful compound where they have a full cotton gyn museum onsite. We also had the privilege of hearing a couple of lecturers and TALL alumnus over a chuck wagon dinner.

Tuesday 10/18

Tuesday was jam packed with visits to the largest Cotton warehouse cooperative in the world, a cotton farm, the USDA grading facility, the Ranching

heritage museum, and an evening reception at the local Farm Museum in Lubbock. This day, like so many TALL days, were so eye opening and overwhelming in an incredibly positive way. Here were a few things that I learned.

I was not aware that unlike corn and beans, cotton was graded like beef for various levels of quality. At the USDA grading facility, we got to watch this process of grading in action. Later, at the Ranching Museum we heard from several Ag Associations; the most entertaining by far was the Sorghum Association CEO. Sorghum I learned is one of our rare net exports to China. This crop, organization, and CEO were all caught up in the Chinese trade and tariff war a few years ago. He had some crazy stories of navigating those waters. Sorghum is the main ingredient in the most popular Chinese alcohol beverage.

After several lectures we got to tour several old cabins and structures that are on display at the Ranching Heritage Museum. This was the largest and most impressive group of historic homes and cabins I have ever seen. Most of these homes normally had limited access by the public, but because our tour guide was a TALL alumnus, we got to explore all of these structures behind the scenes; very cool. The evening activity included a huge reception at a farming museum called the "Fiber Max Center for Discovery". The reception, presentation, and individual dinner hosts after were outstanding.

Wednesday 10/19

On Wednesday we toured a very successful Vet Clinic, a custom grass seed farm, a cotton farm turned vineyard, and ended at a steak dinner at the American Quarter Horse Museum put on by the Texas and Southwester Cattle Raisers Association. Here were a few eye openers for me from the day...

The Muleshoe Vet Clinic and Supply was a *very* impressive business. Years ago, one single vet moved to town and after so many dairies opened in the area, his practice exploded. Adjusting to massive growth in demand is not an easy thing to do. Few folks could have grown their business to meet these needs like Dr. Steve Kennedy. Today Dr. Kennedy employs 8 veterinarians, works on every animal you can imagine both small are large, and operates a full vet supply warehouse and distribution business. What an incredible success story this was.

We then toured a unique business that develops custom grass seed for landscape architects, Pipeline Companies, dam builders, and real-estate developers of all types. Developers come to this business with grass needs specific to climate and purpose etc. The Bamert Seed Company creates custom seed just for them; amazing. This type of operation requires much less water than cotton farms, providing another possible economic lifeboat for West Texas' future. From there, we visited a young couple who have successfully transformed their cotton farm into

a fully functional vineyard. Grapes require 50% of the water that is necessary for cotton to be grown. As such, grapes could also be one of many new economic solutions for West Texas' water shortage issues.

We ended the day at the beautiful and impressive American Quarter Horse Museum. After touring the museum, we attended a great dinner presentation by the Texas and Southwest Cattle Raisers Association; what a fantastic organization.

Thursday 10/20

Thursday morning, we had to be packed up, checked out, and on the bus early as we headed from Lubbock to Amarillo. And yes, you could probably guess what song we blasted over the bus stereo system on the way. In Amarillo we toured The Caviness meat packing plant, the Champion Feeders cattle yard, Micro Technologies Ag Software company, a world-famous Vet Clinic that specializes in cloning, and ended at the Amarillo Country Club to be greeted by a huge crowd and the Town Mayor. What a day! Here are a few highlights for me.

I'll be honest I had no desire to tour a meat packing plant. And after touring one, I now have even less desire to tour another! Though I am certainly very glad meat-packing plants exist to feed the world and provide great jobs for folks, it's not my scene. And I'll leave it at that. The Caviness Owner/Operator Trevor Caviness spent a very long time with us graciously answering our many questions. This is a very impressive multigenerational family business that is meeting a real need in feeding the world, as well as providing tremendous jobs and prosperity to the region. The have multiple facilities across two states and supply the big boys like McDonalds, Wal-Mart, and the likes. They are helping to feed the world.

We then visited an enormous cattle feed yard that exists as the middleman between the ranchers and the packers. They bring in cows, analyze them, and execute custom dietary plans for each cow to maximize their health, grade, and ultimately feed as many people as possible per animal. They too are helping to feed the world. Afterwards we toured an Ag technology company that supplies many of the businesses we previously toured.

After these stops, we visited the famous cloning Veterinarian Dr. Gregg Veneklasen. He showed us horses that were literal genetic clones of one another. The things this man was able to do with genetic science was incredible. It was most inspiring to see a person have such passion for their craft and love for both animals and people. The most interesting thing I heard was that with all our cloning technology it simply cannot be done with humans. For many reasons, I am glad to hear this.

That evening we were hosted at a huge reception bash in Amarillo topped off by a speech from the local Mayor. The Amarillo Country Club was beautiful and our dinner hosts that evening could not have been more gracious.

Friday 10/21

Friday was a great day as we got to tour two proud State schools; West Texas A&M College of Agriculture and the brand-new Texas Tech School of Veterinarian Medicine. Both of these were fantastic visits.

We started off at the new Vet School. Texas previously only had one vet school in Texas A&M that graduate roughly 180 vets a year. Well, the State of Texas simply needs more vets especially those who focus on rural areas and large animal care. This is crucial to our food supply and rapidly growing population. As such the Tech Vet School focuses on recruiting students who are committed to serving rural areas and/or providing large animal care. They will graduated 100 students per year and are already 2 years in. The city of Amarillo gave 60 million dollars toward the construction of this beautiful facility. As a proud Texas Citizen and taxpayer I was so encouraged to see our State meeting this dire need. I now may encourage my children to consider a career in veterinarian medicine.

Afterwards we headed to Canyon where I had my first experience on the beautiful West Texas A&M Campus. Right next door to their awesome new football stadium was an equally impressive new Agriculture School building. Imagine that... two of my passions side by side; football and food! In this building we got to tour their brand new meet packing school where students learn how to work in and manage packing facilities. They even had a beautiful lecture classroom where full carcasses could be brought in hanging on an overhead track. They also had a meat market in the building where locals can come buy fresh steaks and cuts of various proteins. If this were in my town, I would be a frequent shopper. After our tour we were driven back to our original Hotel in Lubbock next to the Texas Tech Campus. It was there we all parted ways.

Conclusion: Once again, I really cannot express in words just how grateful and fortunate I feel to be a part of this program. I am only 2 trips in, and I already know this is a trajectory changer for my young life. I am learning and getting exposure to so many businesses, people, and parts of our world that were simply out of my purview. I am also collecting various tidbits that are helpful at my business as we too try to lead a rural Texas company into the future at the Collin Street Bakery. We are all in this battle together to help feed the world!

TALL Cohort XVIII, Session Two, Texas High Plains Region

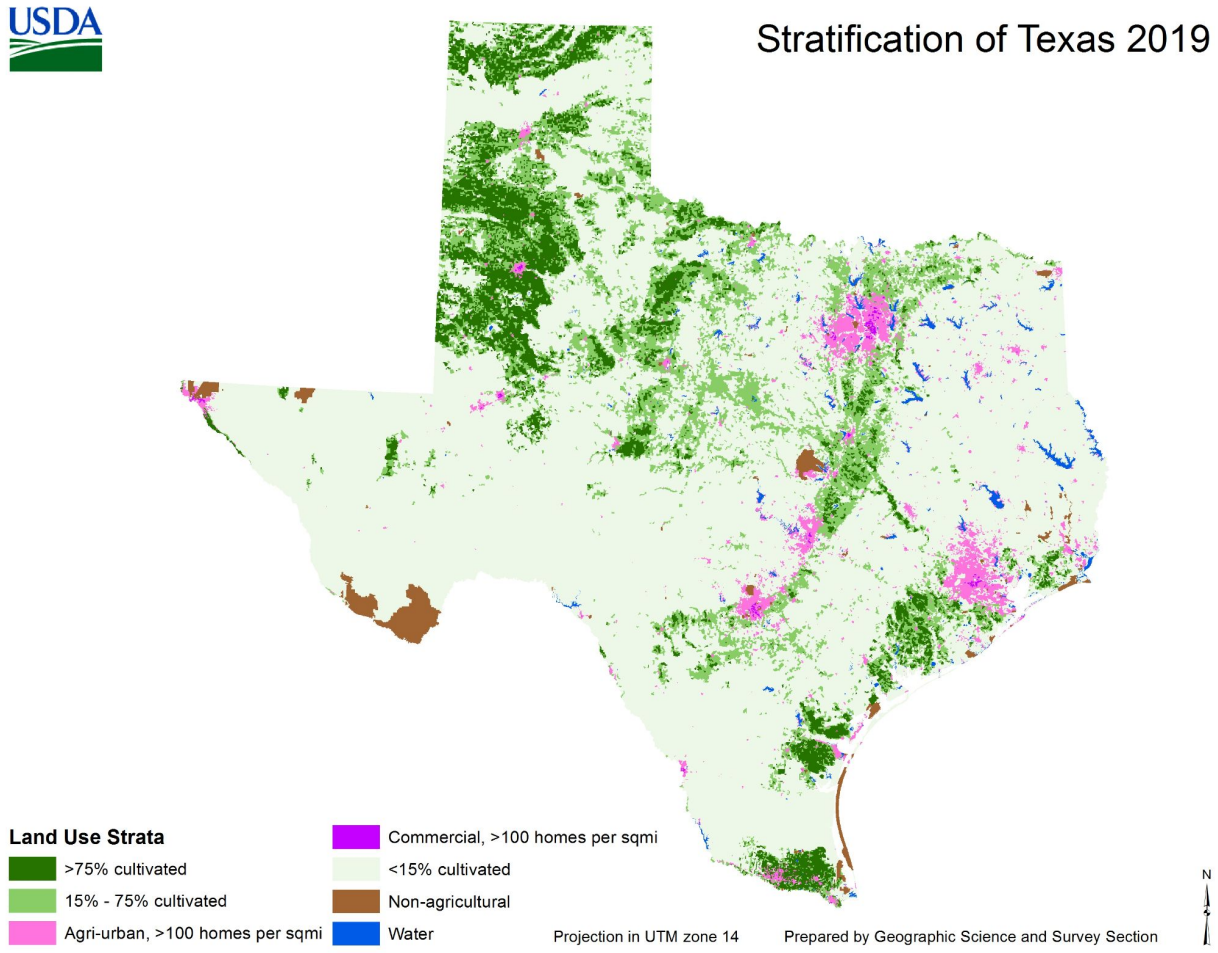
Tillery Sims, Lubbock, Texas

Background

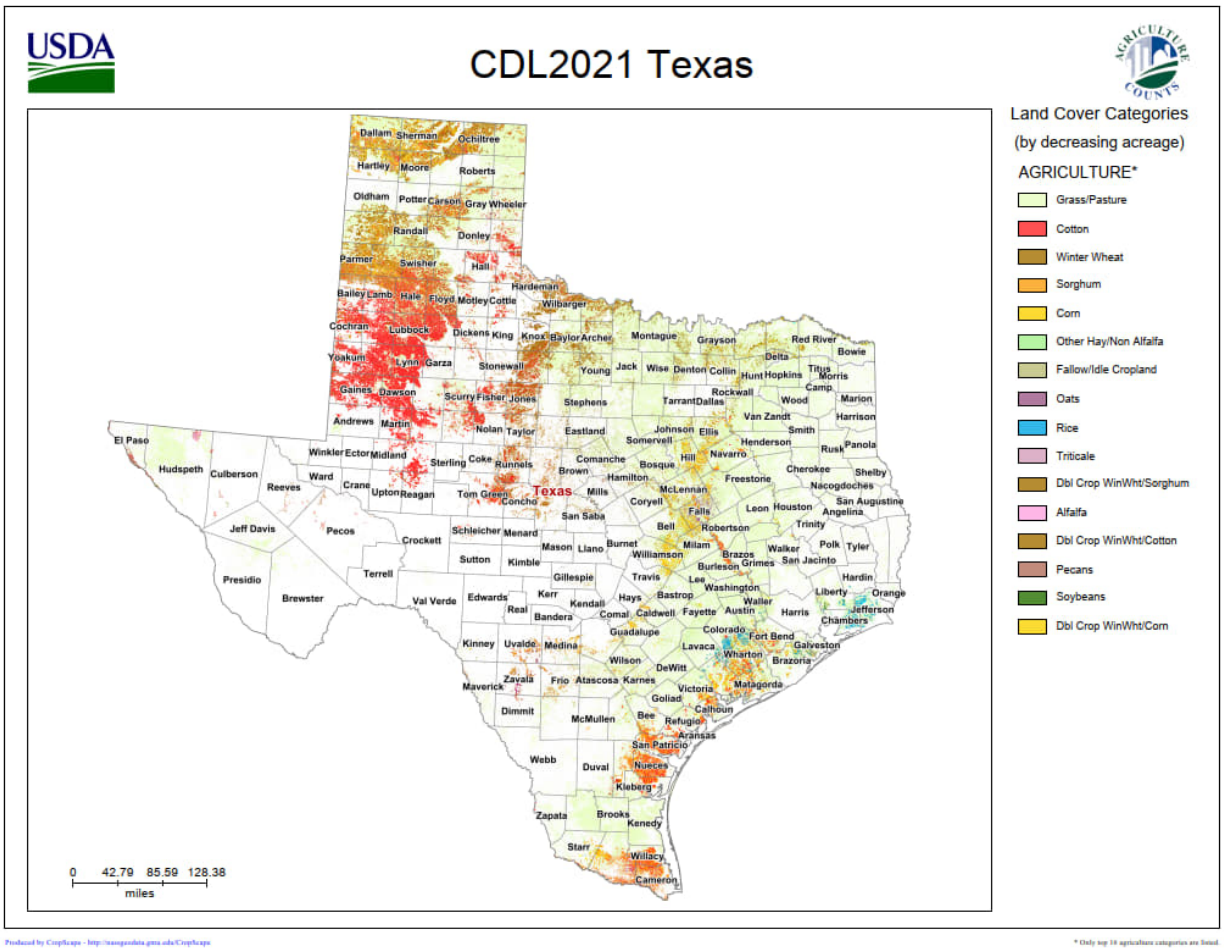
The USDA recognizes the Texas High Plains as two separate regions.

Northern High Plains: The Northern High Plains district is located in the most northern part of the panhandle. The 23 counties included in this district are Armstrong, Briscoe, Carson, Castro, Dallam, Deaf Smith, Floyd, Gray, Hale, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, and Swisher.

Southern High Plains: The Southern High Plains district is located in the lower west side of the panhandle. The 16 counties included in this district are Andrews, Bailey, Cochran, Crosby, Dawson, Gaines, Glasscock, Hockley, Howard, Lamb, Lubbock, Lynn, Martin, Midland, Terry, and Yoakum.



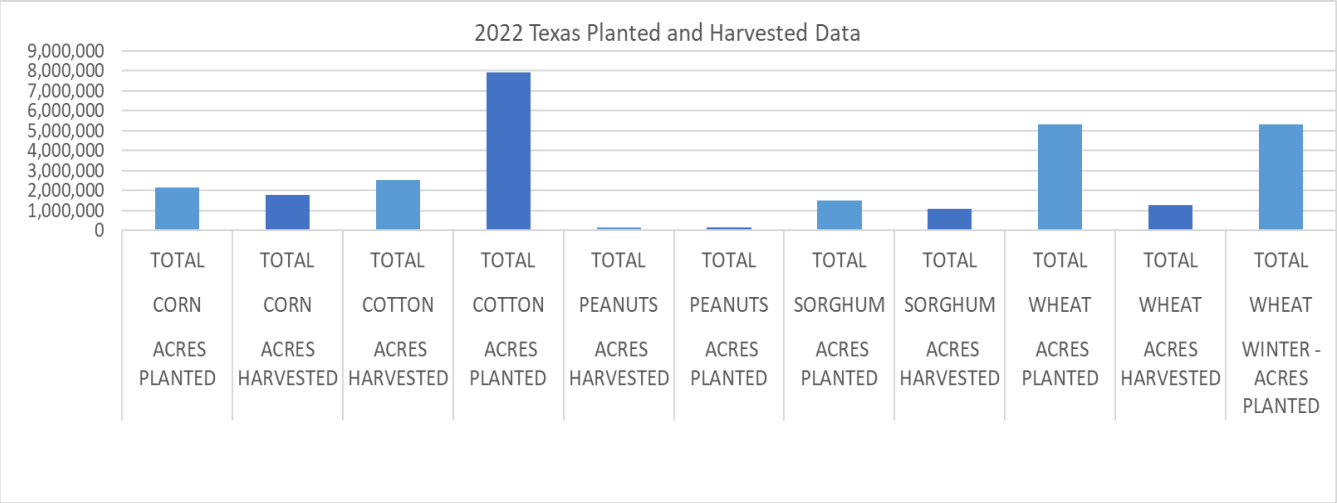
The vast majority of all Texas row crops are grown in these two regions. Therefore, it's essential to understand the amount of production that comes from this region to grasp the impact water shortages will have on the state, the US, and the world. Dependent on a depleting aquifer and plagued by drought, the pressing need for viable solutions weighs on the region.



TALL Cohort XVIII, Session Two, started on Monday evening with dinner hosted by Dan and Linda Taylor. Dan has long been known for his expertise in cotton production and processing. His reputation for honesty and love for the industry is unsurpassed. It was an honor to tour his collection of cotton memorabilia and artifacts. The highlight for me was finding my great, great-grandfather's, great-grandfather's, and grandfather's names in a gin ledger from 1946!

Utilizing his tabletop replica of a cotton gin, Dan demonstrated how cotton is cleaned and ginned. His samples of cotton and cotton seeds at all processing stages were beneficial in laying a foundation for the information provided in the coming days.

We heard from Jason Colman, GM of the High Plains Underground Water District, while enjoying our chuckwagon meal. Jason discussed the single most limiting factor and ongoing problem for the High Plains: the change in rain patterns and the depletion of the Ogella Aquifer. The chart below shows the toll the drought has taken on 2022 planted acres in Texas.



Cotton

As Texas's number one row crop commodity, cotton took its place as "King" during the beginning of the Session. Touring the Farmers Compress with CEO Eric Wanjura and the Cotton Classing Office with Area Director Danny Martinez, we learned the inner workings of a global supply chain that depends on uniform standards and secure, organized storage. Each bale of cotton is individually sampled, tested, and graded. Traceability is a vital component of the process to ensure customers receive the specifications they require. The years of innovation and improvements have developed a dependable system for marketing the 3 million acres of cotton grown in the Lubbock area.

Pioneers in water conservation, Bert and Shelly Heinrich, hosted a tour of their underground drip-irrigated cotton crop. The vast majority of High Plains irrigation is center pivots. The Heinrichs are evangelists for the underground system. They have proven the economics and maximized efficiency through the targeted application of their limited water supply. Shelly serves as Regional Communications Manager Board for The Cotton Board.

While in the field, we heard from Bayer CropScience Agronomist Eric Best. The Heinrich's farming operations are based on technology that Bayer provides. The genetics of Bayer's cotton is developed to be resistant to Bayer chemicals. The technology has increased yields and improved the per-acre profit. Bayer genetics are reliable and guaranteed through replacement or purchase refund programs. However, their system is not without controversy because any plant not resistant to their chemical will be damaged. Even other varieties of cotton are susceptible. Considered differently than pesticide movement by spray drift, the chemical volatilizes and collects together in the atmosphere, hitting unintended targets. The social ramifications have been unfortunate, pitting neighbor against neighbor; each committed to the sustainability of their land and operations.

Commodity Boards, Associations, and Leadership Programs

Leadership across the commodity organizations are working to advance marketing, expand research, develop policy and advocate on behalf of their industry. The Cohort was fortunate to hear from several commodity associations in Session Two. The overarching concern for all is the impacts of the ongoing drought and the 2023 Farm Bill.

These commodity industries, like many others, are served through industry-funded Research and Promotion Programs, unofficially known as Checkoff Programs. Past producers marked a checkoff box if they wished to contribute to the programs funded from assessments charged on a per unit basis of the marketed commodity. Though technology has done away with the checkbox, the name has remained. According to the USDA, "there are currently 22 checkoff programs, representing a wide variety of commodities. From the Fabric of Our Lives® (cotton) to the incredible edible egg™, research and promotion programs have expanded and created identities for things we use every day, increasing consumer awareness and expanding markets for many U.S. commodities." Federal Check-Off Programs "are administered by a board or council whose members are nominated by the specific industry and then appointed by the U.S. Secretary of Agriculture." Partnering with the Checkoff Programs are non-profit commodity associations funded through membership dues. Along with management services, they also provide government advocacy and policy development since checkoff boards are prohibited from such activities.

Texas farmers can choose to fund a state checkoff program as well. These "Commodity Producer Boards" are similar in oversight and funding to federal programs. Any non-profit representing a commodity's producers can petition the Texas Ag Commissioner to be authorized to survey producer approval and elect a board. Texas producers may request a refund should they chose not to participate in the program.

Texas Corn Producers promotes and protects the interests of the state's corn farmers through two organizations: the Texas Corn Producers Board (a state checkoff program) and the Texas Corn Producers Association. The Corn Curriculum for classroom education and the Successful Succession Planning Resource are examples of their insight into the needs of their members. Industry Affairs Director, Angie Martin, encouraged the Cohort to become members of all the commodity groups to stay up to date on pressing issues and support the agriculture industry.

Tim Lust, CEO of The National Sorghum Producers, provided insight into leadership during times of crisis. Grain Sorghum has been a minor crop for decades. Recently, it has grown to become a recognized and valuable commodity with ever-emerging end products through Tim's leadership. Under the direction of Norma Ritz Johnson, Executive Director of The United Sorghum Checkoff Program, sorghum has become a nutritious addition to many foods, including those served in the U.S. public school system.

Plains Cotton Growers Communications Director Kara Bishop's use of stories has dramatically expanded the organization's social media reach. "In agricultural advocacy, it's important to remember that people don't care about facts until you give them a reason to. Most of the time, that reason is a face. Give facts purpose through stories." Kara is not alone in her passion for

advocacy; it is shared by the leadership of all the commodity organizations. The Cohort was encouraged not to be defensive but open and vulnerable. Don't get "barn blind," but prepare a 10-second elevator speech, and always be ready to share it.

Texas Wheat Producers Board (a state checkoff with a .02 fee) was established in 1971 and expanded in 1985 to become a statewide organization. Rodney Mosier, Executive VP, caught up with the Cohort later in the week to provide an overview of their program and priorities. The Texas Wheat Producers Association represents the needs of its members in both DC and Austin. They prioritize farm programs and policies, crop insurance, trade issues, taxes, and state water management and property rights. In addition, they provide education through the Wheat Foods Council and fund a statewide breeding program, wheat variety trials, and research end-use quality. Dry weather conditions have reduced wheat production by 50%, setting a state record.

Founded in 1969 and funded by voluntary checkoff money, The Texas Peanut Producers Board is the oldest agricultural commodity board in Texas. There are four varieties of peanuts, and Texas is the only state to grow all four, both conventional and organic. Texas ranks 4th in US peanut production. The Peanut Board funds disease control research and variety trials.

"The Texas Cattle Feeders Association represents the cattle feeding industry in the three-state region of Texas, Oklahoma, and New Mexico. "TCFA members annually market more than 6 million fed cattle – approximately 28 percent of the fed cattle produced in the United States." TFCA serves the largest cattle feeding region in the US by "advancing the economic, political, environmental and cultural interests of cattle feeders and feedyard members, enhancing the reputation of fed beef production and increasing consumer confidence in beef."

Established in 1877, Texas and Southwestern Cattle Raiser Association is the largest and oldest livestock association in Texas. They represent 17,500 producers and businesses who manage 4 million head of cattle on 76 million acres of land. In addition, TSCRA provides advocacy with law enforcement and government, industry news, policy, education, and value-added services to their members and the cattle industry. The Cohort enjoyed a delicious prime rib dinner at the American Quarter Horse Association Museum hosted by TSCRA and AQHA.

Inspired by her TALL experience, Dr. Lindsay Kennedy created the TTU MILE Program to meet a need she saw in her students. MILE provides "unique leadership and professional development experiences," giving "participants exposure to the diverse issues affecting agriculture and public policy." The Cohort heard from two MILE participants, and later met others at the evening reception. As a member of TALL, their excitement for the program was relatable. Sowing leadership skills and building a network of relationships for the next generation will yield a harvest of great candidates for future TALL cohorts.

National Ranching Heritage Center at Texas Tech

TALL alumnus Lea Ann Lust led an energetic tour of the Ranching Heritage Center at Texas Tech. Her enthusiasm for our heritage was infectious. It was fun to see NRHC through the eyes of others outside of the High Plains. Their stated mission "to preserve and interpret the history of ranching in North America and address contemporary ranching issues." is carried out in part through a collection of historic Texas homes, barns, a church, a train ready for loading cattle, and the kids' favorite, an outhouse. In addition, NRHC is expanding to include the ***Cash Family Ranch Life Learning Center***. This indoor/outdoor education center will consist of "interactive exhibits and an immersive version of the ranch from the "Hank the Cowdog" book series."

TALL Alumni and Receptions

The TALL alums for the High Plains plan Session Two for each new Cohort and fund it. Tanya Foerster (TALL XVII) organized a fantastic week. A TALL reception is hosted in Lubbock (FiberMax Center for Discovery - Agriculture) and Amarillo to introduce the new Cohort members and recognize the people who prioritize TALL every session. At the Lubbock reception, Bert and Shelly Heinrick were recognized for their ongoing support and efforts to educate each new Cohort. The evening's speaker was 5th-generation cotton farmer Jeremy Brown. Jeremy runs his farming operation, Broadview Agriculture, with an eye on the expanding possibilities made from his focus on "soil health over per acre yield" and a diversity of crops. Jeremy is proving successful with regenerative farm practices growing conventional and organic crops.

The Amarillo reception featured Mayor Ginger Nelson. Mayor Nelson has led a solid effort to revitalize the city and the region. As she stated, Amarillo doesn't see itself as a city but as a region. As a result, the city is investing dollars into projects whose benefits expand outside the city limits. Projects such as the new producer-owned meat packing plant and an expansion of the Caviness Beef Packers facility prove their commitment to the region.

Diversification

The Cohort made its way to Amarillo through the western part of the High Plains beginning with Dr. Steve Kennedy at Muleshoe Animal Clinic & Muleshoe Vet Supply. Dr. Kennedy's business is a well-oiled machine. It is fully stocked and organized to meet the needs of the 100-plus dairies that have popped up over the last two decades." On its present path, signs point to Texas becoming the third-largest milk-producing state in the U.S. by 2025." The water needs of the dairies have had a negative impact on local farming. However, the area has adapted, and values the economic advantages the dairies have provided.

This adaption of the area was the topic of conversation with Bamert Seed. Forward-thinking, the Bamerts anticipate the transition from row crops back to grasslands. Specializing in Texas native seed since 1951, the Bamert family are conservation partners respected across the state. As the Ogalla Aquifer drops and rain patterns remain dry, Bailey County farmers can row crop on only a portion of their acres. Diversification to grazing (cattle and sheep) and higher-value crops is an idea some are trying, like the Burch Family in Friona. Growing grapes (Cabernet, Pinot Noir, Riesling, Rousanne, and Tempranillo), Brenna and Keith are taking advantage of the dry terrain, sandy soil, and high heat of High Plains AVA. Grape production has a long history in

Texas, beginning with Spanish missionaries in the 1600s. In 2001 legislative changes led by then Ag Commissioner Susan Combs opened the door for industry expansion. The *total* economic impact of the less than 5,000 acres of grapes was 23.35 billion dollars in 2021. What started as a "pipe dream" and a desperate need to diversify led to a 25-acre vineyard (six more in 2023) and a Viticulture Certificate from Texas Tech for Breena. The Burch family is an example of innovation and determination tempered with the ability to adapt and change. And they have some great-tasting wines!

Lance Insurance in Muleshoe helps farmers navigate an often complicated but vital federal program. The Federal Crop Insurance Program began in 1938 to help farmers recover from the Dust Bowl. Coverage has expanded through the years. The 2018 Farm Bill's use of additional USDA data helped to improve pricing significantly. The 2022 drought has certainly proven the program's necessity as cotton farmers abandoned nearly 70% of their spring planting.

Cattle

Cattle earn the prize as the top agricultural commodity in the State. Starting with a tour of Cargill's RAMP+Sweetbran manufacturing facility in Bovina, the focus for the remainder of the week shifted to cattle production. From the feed to the plate, we experienced it all. The Cargill Sweetbran faculty sources corn from the Cargill processor in the midwest to craft its proprietary products that supply Cargill feedlots that supply the Cargill meat packer plant. Founded in 1865, this vertically integrated company is still a family-owned business. Cassie Schulte, Dairy Sales manager, provided an overview of the operations in the midwest, setting the stage for an exclusive tour. The size of their manufacturing process is enormous but highly efficient and clean, emphasizing safety. This video, though not the U.S. plant, gives an idea of Cargill's massive impact on the global food supply chain.

Champion Feeders and TCFA co-hosted a tour of Champion's 35,000-head feed yard in Herford. They prioritize partnerships with their customers and service both large and small feeders. Between their two locations, Champion can feed close to 100k head of cattle. Committed to the health and safety of the cattle, Champion Feeders utilize modern innovative technology.

Micro Technologies has been leading the industry in feedlot technology. Their robots travel feedyards collecting data while their feed machines ensure correct mixtures and keep track of supply as it is consumed. Technology and modernization are all part of the efforts across the supply chain to increase efficiency while ensuring food safety.

Despite all the modernization, working a packing line is not for the faint of heart. Yet, the employee retention rate for Caviness Meat Packers is well above the average at 80%. This family-run operation is committed to the well-being of its employees, and you can see the pride those employees take in their work. A safety advisory board is made up of employees who offer suggestions that are implemented by management. Touring two meat packers, Caviness and the West Texas A&M facility, could have been overwhelming. However, both sites were immaculate and efficient increasing confidence in the safety of our meat.

West Texas A&M and TA&MU Veterinary Education, Research, and Outreach - VERO

Dr. Ty Lawrence, Professor and Director of the West Texas A&M Beef Carcass Research Center, provided the Cohort with a taste test of various protein alternatives and education on their ingredients. Market drivers such as health concerns, food safety, animal welfare, and sustainability have yet to impact consumer demand. In 2020, 80% of Americans surveyed identified themselves as "meat eater." Despite the 3.1 billion dollars invested in 2020, wealthy agenda-driven investors have not been able to create repeat buyers out of curious consumers. No plant-based alternative can compete with the complete protein profile of beef. Cell-cultured meats are not economically viable, have the texture of pudding, and require growth hormones that would offend their customer base.

WTA&M has served the Panhandle region since 1910, providing rural students with a quality education and expanding their horizons in an atmosphere that still "feels like home." The administration and staff provide caring relationships that give rural and first-generation students the confidence they need to succeed.

Acutely aware of the need for rural, large animal veterinarians, in 2009, TA&MU expanded part of their veterinary program to the campus of West Texas A&M in Canyon. Dr. Lance Kieth, Department Head and Professor of Ag Education, and his staff partner with undergraduates to develop an individualized path for admissions into the program. As a result, VERO is allowing more students from WT and the Texas Panhandle to stay close to home and still receive their education from one of the best veterinary schools in the nation.

"The first Cohort of up to 18 Texas A&M first-year veterinary students began their DVM studies at the VERO facility in fall 2021. Those students will spend their first two years in Canyon on WT's campus, where they will receive essentially the same basic DVM education provided in College Station, but with convenient exposure to livestock and rural veterinary medicine. Every year after, there will be two cohorts at one time cycling through the Canyon location before their third year at the VMBS in College Station, with the option of returning to Canyon for a portion of their fourth-year clinical rotations. The Cohort will increase the total number of students enrolled in the VMBS' DVM program to 180—the largest in the nation."

Timber Creek Veterinary Hospital, Dr. Gregg Veneklasen - Equine Cloning

In 2020, Dr. Veneklasen cloned Kurt from the cells of a Prezwalski stallion who died in 1998. The egg's nucleus is first removed, with all the DNA stored inside. Next, the stallion's cryopreserved cells are thawed and fused with an egg from a female domestic horse. This process creates a clone or genetic twin of the father. Przewalski horses are thought to be the last breed of truly wild horses. Since the remaining 2,000 horses are all bred from the same stock, adding Kurt's genes will prevent health and reproductive issues caused by inbreeding.

A passionate genius, Dr. Veneklasen has confidence in the science of cloning, "We can all have our own opinions, but we can't all have our own facts." He sees cloning as his contribution to improving human and animal life. Dr. Veneklasen was recently named the 2022 PRCA Veterinarian of the Year.

Texas Tech Veterinary School

The new TTU School of Veterinary Medicine in Amarillo is housed in a state-of-the-art 180 million sq ft building, designed to match the Spanish Renaissance style of architecture on the TTU campus that "represents the southwestern history of the region."

The need for rural, large animal vets is so great in the state that even 4-6 new schools would still not satisfy the demand. So Texans suffering the real-life consequences of the shortage donated 105 million dollars to build the facility. They are so motivated to fix the problem that 90 million of the funds were raised in the first ten months of the project.

TTU's common sense approach to admissions is crafted to attract the needed demographic of students. Their approach is working. Men are more interested in large animal work, but they represent only 15-18% of the student population at other schools. 30% of the students at TTU SVM are men.

The 800 applications come from a mix of TTU and TA&MU graduates whose admission is based on their story, not their grades. Rural students committed to their communities are prioritized. A 2.9 GPA is required, but no testing, including the GRE. Committed to low tuition costs and an apprenticeship approach, only 100 students a year are selected. Tuition and fees are less than half the average of other schools, and grants cover 25% of the $22,000.

Students are paired with rural clinical partners to provide on-the-job training. They will be performing surgeries in rural clinics by their third semester. Graduates have all the experience they need upon graduation; no on-the-job training is required.

Lower student loan debt and experienced graduates connected to rural vet clinics create the incentive to stay in rural communities and work with large animals.