Jennifer Blackburn #3 TALL XV Session III – Austin and Sonora, Texas

I have been looking forward to the Austin session since we began this journey for many reasons. Although I have lived in Texas for almost 10 years now, I have never made it to the state capitol building. Through my career, involvement has centered more on federal politics in Washington, D.C., so with the understanding of the need to be involved personally there and at home, having the opportunity to go and meet not only our local representatives but to have access to so many important officials across the spectrum in the Texas legislature was really an honor for my classmates and I.

I. Tuesday, January 17, 2017

Atmospheric Water Generation Demonstration—Mr. Moses A. West, Chief Executive Officer and Founding Partner with Joey Estrada, Business Development and Grants Program Manager for the Texas Military Department, Texas Army National Guard

TALL XV Session III convened at Camp Mabry in Austin. Waiting in the parking lot for more of our classmates and Dr. Mazurkiewicz to arrive, Moses and one of his friends who is a U.S. Marine greeted us in the parking lot and took us to the building where the presentation would be. Along the way he took the few of us there early through a room where they were assembling guns, which was fascinating to see the speed and efficiency with which they were doing that.

Moses is a military man and an engineer with a noble cause—to provide living water to those in need. Moses and his team have developed patented, state-of-the-art technology, the AWG5000, that transforms atmospheric humidity into clean potable water, and it does so extremely efficiently at the lowest power consumption rate. Once started, it can produce 2,200 gallons of water in a day. Other features include:

- Wide range of operating conditions: 5°C-55°C; 20%-99% RH
- Three-phase; 400V/460V; 50 Hz/60 Hz; 100A
- Treatment system and complete water filtration
- Generator with autonomy for 5 days
- Self-powered + grid connection
- Any electrical energy, including renewable
- Mobil allows for immediate on-site water production
- Fast set up, sliding platform
- Automatic switch on/off
- Internal pumping
- Water tank reserve
- Low maintenance
- All components NSF 61 certified

Mr. Estrada spoke to the military uses of the machine, and said the primary goal is to produce water at military bases overseas doing military operations so they do not have to continue to truck in water for every day needs like cooking, showering or other activities that require water. Typically there is a convoy every 3-6 days that takes water to those military bases. If they can eliminate water as a source that needs to be brought to the bases, the military can utilize soldiers for other mission purposes and reduce casualties because often those convoys are attacked in the process of water deliveries.

The technology can also be used for emergency situations like city water contaminations like the incident that recently happened in Corpus Christi and during natural disasters like Hurricane Katrina. Moses pointed out that it is hard for water trucks to drive into areas where traffic is trying to get out. If the machine is already there, clean water can be provided from the air and serve as a central location to provide aid to those who need it. Moses also showed us small scale home units they have developed.

While the AWG5000 has been focused for military use, Moses specifically has a goal to use these machines to pump water back into our depleting aquifers.

Legislative Overview – Joe Cox and Cristina Cornejo

My first trip to the Texas State Capitol started off in a familiar way. Like the presentations prepared for the farmers I represent at our own legislative fly-ins to Washington, D.C., Mr. Cox and Ms. Cornejo walked us through the democratic process, the role we can play and what to expect meeting with the staff and representatives that put in countless hours to represent our individual needs in the state of Texas. They both explained the difficult budget situation we face this biennium, and I liked how Mr. Cox said, "We are past the fat and have started hitting muscle. That's where we're at," explaining the approach to deciding where to spend the more discretionary dollars—the tough decisions.

Agricultural Priorities for the Upcoming Legislative Session – Representative Kyle Kacal

I very much enjoyed listening to our next speaker Representative Kyle Kacal. He's one of the guys who makes you feel like you are speaking to one of your own. He went around the room and wanted to know what each one of us did, and he had a connection with almost every one of us. Kacal talked about the issues we face, and know, and the challenges he sees working across the aisle with his colleagues in the Texas House of Representatives. As the only production ag individual in the Texas legislature of 150, Representative Kacal explained the importance of his job educating others about agriculture. One thing that struck me during his talk was an emphasis on personalities, knowing who you are and what your role can be. Representative Kacal also talked about passing legislation last session and not receiving any questions from his colleagues after he expected to battle for it. Even though his bill passed with ease, and that was good, it underscores the lack of understanding from urban representatives to even refute it. Kacal also talked about the use of social media and the impact a person can

make through education with tools like Twitter. As a communicator, I appreciate his willingness to step out of his comfort zone and utilize a tool to connect with demographics that are sometimes challenging to reach through other mediums.

Immigration and Border Issues – Representative Ryan Guillen

Representative Guillen spoke about the many issues legislators will encounter this legislative session, but he particularly spoke about the immigration and border issues we face in Texas. When an uptick in violence began in 2007, that biennium \$100 million was devoted to address the issue. \$800 million was allocated the last appropriations process, adding 250 new troopers and items like additional cameras and other equipment needed. This session, another \$300 million is being requested to hire more troopers. Guillen commented on how crime has been reduced in the targeted counties these funds have been utilized, but unfortunately that crime has just moved to another location along the border that does not have the same level of resources. Representative Guillen also commented on how it will be interesting to see what takes place with the new federal administration and plans to continue addressing the ongoing issue of boarder security and violence.

Ag Issues Facing Texas – Jason Fearneyhough, Texas Deputy Commissioner of Ag

Deputy Commissioner of Agriculture Jason Fearneyhough spent time discussing with us the top issues facing agriculture at this time. Of course low prices came to the top of the list and impacts were noted by various classmates. We also talked about the fact that a Secretary of Agriculture had not been appointed yet, and the perception that leaves from a priority standpoint as it relates to agriculture's needs and addressing those. Discussion also centered around guest worker programs and what that program might look like with opposing viewpoints among the group on items like receiving social security monies if exiting the country and paying taxes. The 2-4-D spray drift issue was also brought up and the contention between cotton growers, grape growers and the chemical companies. That is expected to be a topic of discussion this legislative session. Mr. Fearneyhough closed with, "Never lose sight of the opportunity that exists in agriculture today."

Appropriations, Budget Transparency and Reform, Higher Education and Priorities for the 85th Legislative Session – Representative John Raney

Representative John Raney gave the class sound advice during his presentation. He said when it comes to politics be a participant, don't be on the sidelines or on outside complaining, support a candidate you believe in, build relationships with elected officials, build relationships for yourself not for other people, don't use your points for things that are not important, and don't call those representatives all the time. He also said to participate in the party and emphasized the importance of voting in the primary, where your voice is actually heard, and not waiting until the general election to vote.

Conserving Texas Land for Future Generations – Ms. Blair Fitzsimons

We ended the first day listening to Ms. Fitzsimons speak about the Texas Agricultural Land Trust, a company I was unfamiliar with prior to her presentation, and their efforts to conserve Texas land for future generations. Suburbanization and fragmentation of larger pieces of land are threatening rural land loss, and the TALT is working to stem the irreversible loss of rural lands through the conservation of private land, wildlife habitats and natural resources and ensuring landowner's property rights do not erode over time. TALT has partnered with landowners to conserve 226,177 acres of working lands in Texas thus far, which are under conservation easements around the state.

Other facts we learned include:

- There are 142 million acres of working lands and timber.
- Texas is losing land a faster rate than any other state.
- Less than 1 percent of state population owns and manages rural land.
- 1 million 2 million acres of agriculture land are lost every 10 years.
- A Texas A&M University study showed \$130 million is needed to have a measurable impact on the conservation of working lands and ranches.
- The Davis Mountains are the most prevalent area for easements and the Texas Hill Country.

Your Beef Checkoff Dollars at Work—Richard Wortham, Executive Vice President, Texas Beef Council

Our first day ended with dinner at Uncle Julio's graciously sponsored by the Texas Beef Council. After some amazing fajitas, Mr. Wortham, who has a fascinating baseball career prior to working for the beef council, talked to us about the many activities TBC does to promote Texas and U.S. beef. The "Beef Loving Texans" campaign, which our very own classmate John Locke has been featured in, was explained as well as the "Team Beef" initiative runners can be a part of to promote beef consumption, which another classmate Sarah Cortese-Fitzgerald is a member. TBC does a tremendous job promoting and supporting the beef industry and serves as a great example for other promotion boards. Mr. Wortham sent us home with packets including more information about beef nutrition and a Beef Loving Texans apron, which I now proudly hang next to my New Mexico Beef It's What's for Dinner apron at home.

II. Wednesday, January 18, 2017

Duties and Responsibilities of the Natural Resource, Appropriations and House Administration Committees – Trent Ashby

Right away, Representative Ashby was quick to point out the significance of the state capitol building and who it belongs to, saying "At your state capitol, I hope you feel at home. It is as much your place as it is mine." Representative Ashby spoke on the role the natural resource committee has and the value of the committee, which was especially prevalent with the 2011

drought. Water has been and will continue to be a significant issue this legislative session, he said. Ashby briefly mentioned the 50-year state water plan put together by 16 water planning regions. He foresees many more regional water projects being funded in the future. Ashby also commented on the fact that water usage in the High Plains is starting to garner more than usual attention in Austin, saying the usage number on the pie chart relevant to the rest of the state jumps out, and he emphasized how important it is to education people and our legislators on why water use is important as it relates to agriculture.

Duties and Responsibilities of the Railroad Commission of Texas—Christi Craddick, Chair of the Railroad Commission of Texas

The first thing Ms. Craddick did was dispel the misconceptions about the responsibilities of the railroad commission given its name. The committee primarily focuses on oil and gas, not the railroad. While some believe the commission should just change its name, Ms. Craddick put into perspective the cost alone to do that—\$425,000. Currently, oil and gas makes up 30 percent of the Texas economy and to drill and oil well, approval from the state railroad commission is required. There are 400,000 active wells in the state, and 1.5 million wells have been drilled historically in Texas. Production is at 2.6 million barrels per day, down 200,000 barrels from last year, and 200,000 BCF of natural gas is being produced. She commented on how the Permian Basin is the most attractive place in the country as the oil potential for that region has just begun, and Texas has the most pipe in its state by a sixth than any other state in the U.S. with 40,000 miles of pipelines. Ms. Craddick, also covered the regulatory burdens that agriculture and oil and gas alike share in measures like Waters of the U.S. and the Endangered Species Act, saying the overreach is significant and she is hopeful for a shakeup at the Environmental Protection Agency with the new administration. Continued outreach and education is part of the railroad commission's long-term goal.

Texas Ag Council Meeting—Chairman Darren Turley, TALL XII Alumnus TAC Chair, Texas Association of Dairymen

For lunch, TALL XV headed to the Methodist church near the capitol to meet with the Texas Ag Club. It was humbling to be in a room with so many people who dedicate their lives to agriculture and their respective industries. Many of these individuals are my friends, and I enjoyed getting to know several others. They are the front line for agriculture in the state capitol, and I was proud to sit among them. After introductions, there was a video presentation from TALL XIV, highlighting their international trip last year, which only generated more excitement for our own. Afterward, the council reported on important issues for members to consider in the next week, demonstrating the importance of working together for common goals even though each industry has their particular issues to address this legislative session. The council was then kind enough to let us join them for lunch, and we were able to get to know members better there, as well.

"A Tribute to Texas Leadership" - TALL Alumni reception—Austin Club

The evening reception for TALL alumni and guests was a tremendous event I was honored to be a part of. Being a part of TALL, I often think about the access it has given us to so many wonderful people and places, but it was here I realized it is more than access. This is a community and a family. And we don't always realize who is a member of that community, but every session I discover more people that I either know, or met that trip, that are alumni or friends of the program, further underscoring how blessed I feel to be a part of it. The program honored the men who founded the TALL program, and I think about the wisdom and the foresight they had to create a network so foundational to protecting agriculture—humble, wonderful men. Texas Comptroller of Public Accounts Glen Hegar gave a comical and inspiring keynote address, and I was proud to join the TALL community honoring both Bob Stallman and Jennifer Yezak—two phenomenal individuals I have had the pleasure to watch and learn from during my career with sorghum. The TALL raffle fundraiser was also successful, and TALL XV was able to maintain the lead for ticket sales. I was unable to take any prizes home to those I sold to but was grateful to contribute to a program that has already given me so much.

III. Thursday, January 19, 2017

The Texas Oil & Gas Association: Duties, Issues, and Initiatives of the Industry—Todd Staples, President of the Texas Oil & Gas Association

Thursday morning, we started off hearing from Mr. Todd Staples who emphasized the importance of leadership and the value of the program we are all a part of. The Texas Oil & Gas Association is the oldest and largest trade association, representing every facet of the industry. Oil and gas is an integral part of the state of Texas, and Staples said if there is a downturn in the industry, it negatively affects all Texans. One discussion I found interesting was when Staples said the anti-agriculture groups use the same playbook to disrupt the industry as the anti-oil and gas books, and I'm sure no one knows that better than he does as a man who has represented the interests of both industries. Priorities for the industry going forward are to see that the railroad commission is reauthorized, address tax policy and critical infrastructure needs.

The Responsibilities and Function of the General Land Office of Texas—The Honorable George P. Bush, Texas Land Commissioner

George P. Bush exemplifies the character of the Bush family—kind and genuine. What an honor to meet the upcoming generation of a family so rich in political history in our state and in this country. His knowledge about the history of Texas, the role of the General Land Office and its dedication to preserving Texas heritage was impressive. The General Land Office is also charged with taking care of military veterans, providing financial service for 1.7 million veterans. They also partner with the Texas Veterans Commission to help veterans transition to life at home. The GLO is entrusted with the Texas archives and historical documents, holding the draft of the Texas Constitution that mentions "Texas" for the first time in the second draft. Bush also spent

a lot of time describing the efforts to preserve the Alamo and to expand that site to more authentically honor what the Alamo means to Texas and accommodate the 2.5 million annual visitors.

Rural America Strikes Back and Functions and Duties as General Counsel for the Texas RNC— Managing Member, Eric Opiela PLLC

Eric Opiela was one of my favorite speakers this entire session. Enthusiastic and a with a voice that commands a room, he showed us the ins and outs of rural American demographics and how those voters came through this past presidential election. I think I was most impressed by his maps though. The way he was able to skew the U.S. map to represent different demographics was very interesting! Opiela placed a lot of emphasis on the economy and the role it played in the recent election, quoting James Carville in 1992, "It's the economy, stupid." In counties with less than 50 percent turnout, Trump won 75 percent of the votes, and Trump would have lost Texas by 185,000 votes without rural counties. It was also interesting to hear his perspective on future party demographics, saying once Texas falls to a democratic candidate, the republican party ceases to exist. That's a very sobering statement to hear.

Responsibilities and Duties of the TxDOT and the State of Texas Infrastructure—Mr. James Bass Executive Director of the Texas Department of Transportation

Our next speaker was James Bass with the Texas Department of Transportation. Texas exports more goods than any other state in the nation. The state has 3,400 miles of interstate—more than any other state, and it has 195,000 lane miles, which can go around the equator eight times. Mr. Bass said planning for the future of transportation will be important like transitioning from manure removal on roads when that transition took place to accommodating electric and automated vehicles in the future. Truck weight limit restrictions are an issue they will be watching closely this next legislative session, and they look forward to the 10-year, \$70 billion plan, thanks to funding initiatives approved by Texas voters.

Responsibilities and Duties of the TCEQ—Dr. Bryan Shaw Chairman, Texas Commission on Environmental Quality

Mr. Bryan Shaw was quick to point out that the Texas Commission on Environmental Quality is not the Environmental Protection Agency of Texas, even though its responsibilities relate to clean air, water and safe management of waste. The TCEQ has 2,800 full-time employees. Most of the funds collected by the TCEQ are in the form of fees—80 percent—with a 2 percent general revenue, and the rest is pass through funds. A focus for the commission has been Waters of the U.S., which the commission would be responsible for if implemented and President Trump does not overturn. Mr. Shaw said will be interesting to see what the Trump administration does, and cost is not his biggest concern. He said it is written to be ripe for expansion and prohibits the ability to contest or challenge, resulting in mounting lawsuits. I was encouraged to hear Mr. Shaw's take on WOTUS as I have actively worked against the ruling through my own work at National Sorghum Producers.

Responsibilities for the Comptroller, 2017 Revenue Estimates and 2017 Budget Projections— Mr. Tom Currah, Chief Revenue Estimator for the Comptroller's Office

Mr. Currah was our next speaker and detailed the work he does to provide the legislature with revenue estimates. He said his office projects out more than two years of revenue, and when you project that far out, it will not always be accurate. There are 160 different sources of revenue in the state of Texas. He also said before budget goes to the Governor, it must go to comptroller to make sure it is not out of budget and does not surpass expected revenue. Even though they project lower spending next biennium, they do not project an economic downturn. Key drivers in the state's economy that are looked at more than other factors when doing the budget include:

- Personal income (wages/rent/etc)
- Sales tax (not as correlated with personal income as it used to be)
- Oil and gas tax revenue
- Employment growth

Texas Parks and Wildlife Department Major Initiatives and Agency Responsibilities—Mr. Carter Smith Executive Director of Wildlife, Texas Parks and Wildlife Department

Another speaker I really enjoyed listening to was Mr. Carter Smith with the Texas Parks and Wildlife Department. He began giving us the history of the department with roots starting in the 1800s when quail hunting was banned on Galveston Island—the first game ban in the state of Texas. Then, the Office of the Fish Commissioner was established when concerns were generated about the state's fish species. In 1881, that position was abolished, and in 1885, the state implemented the oyster commission when oysters were being heavily used to build walls and roads. Now 125 years, the department still protects oysters. Finally, we received a fascinating story about a Game Warden by the name of Grover Simpson who busted U.S. Sen. Lyndon Baines Johnson and Gov. John Connally for hunting dove illegally at dusk. You can read the full story here. In the end, it led to the merger off the Game and Fish Commission with the State Parks Board to create the newly minted Texas Parks and Wildlife Department. Responsibilities of the TPWD include stewarding the states land, fish, game, parks and outdoor recreation locations. Texas has the most deer, dove and ducks than any other state and is second in plants and mammals. Other facts include:

- 3300 professionals in all 254 counties
- \$450 million annual budget primarily from:
 - o from hunting and fishing licenses
 - state parks goers
- TPWD stewards 90 state parks
- 51 wildlife management areas
- TPWD manages fisheries
- The state game wardens are the second largest police force in Texas
- One-fifth of the state is under a conservation plan

Mr. Smith closed with the fact that he is proud of state landowners, farmers and ranchers as the No. 1 steward of fish and wildlife in the state of Texas.

Oversight and Responsibilities of the Texas Animal Health Commission—Mrs. Mary Thiel Luedeker, TALL XIV Alumnae and Governmental Industry Relations & Assistant General Counsel

Our final speaker for the day was Mary Thiel with the Texas Animal Health Commission, which was founded in 1893 to address the Texas fever tick problem. Today the agency works to protect the health of cattle, poultry, sheep, goats, swine, equine and exotic livestock. Although not its primary mission, the TAHC also works with the Texas Department of Agriculture and Texas AgriLife Extension to help protect animals during emergency situations. TAHC regulations are approved by 13 governor-appointed commissioners who serve six-year staggered terms. There are eight region offices strategically located across the state. The TAHC staff work closely with veterinarians, ranchers, livestock markets, slaughter plants and other livestock industry stakeholders. There are 3 emergency management personnel who are responsible for planning for and coordinating response activities for disease outbreaks in livestock and poultry and natural disasters, like hurricanes and wildfires, impacting animals. There is one state lab located in Austin where diseases like tuberculosis, brucellosis and several others are handled.

Chronic wasting disease will be one of the key legislative items. CWD was confirmed in one elk Dec. 8 in the Texas Panhandle the TAHC is monitoring. A mule deer was also confirmed the week prior to our session. The stance and view of the TAHC is to always be cautious when it comes to public announcements because there have been false positives before, and they will not announce a suspect positive result until it is scientifically confirmed by a lab. Texas serves as the border that secures the rest of U.S. from harmful diseases generated in Mexico. The U.S. Department of Agriculture has tick riders who patrol horseback on the border, roping cows on river. This has become even more critical since Mexico quit all fever tick activity in 2012.

Reception at the State Capitol, Lt. Governor's Reception Room

After a long day of speakers, TALL XV headed to the Lt. Governor's Reception Room, hearing from Dr. Jim the history of how the room burned in the past as an apartment and was then turned into a reception room to hold events. Even though Mr. Morrissey had to leave early to tend to his mother's health, he still spent an hour detailing the budget process with us. We also had the opportunity to hear from Representative Ernest Bailes IV, who spoke about his path to becoming a state representative and the trials and tribulations he faced on the way. The reception was graciously hosted by the Texas Pork Producers represented by Brandon Gunn and the Texas Poultry Federation represented by James Grimes who each spoke about their respective industries and associations.

IV. Friday, January 20, 2017

An Overview of the Texas Dairy Industry—Mr. Darren Turley, TALL XII Alumnus and TAC Chair, Texas Association of Dairymen

Friday morning started bright and early with Darren Turley of the Texas Association of Dairymen. Eating breakfast, Mr. Turley talked about his weight lifting career and records, which was a perfect segue into the nutritional characteristics milk has for muscle recovery and retention with aging. Mr. Turley said \$1 billion is being invested in the dairy industry in the Texas and Southwest Oklahoma area. Expansions like the Dalhart cheese plant are enhancing the industry. Turley said hurdles the industry currently faces include educating consumers about the safety of pasteurizing milk and correct identification of other products using the word "milk" like soy milk and almond milk marketing. This is an area I have seen particularly at the national milk level in meetings with the USDA Agricultural Marketing Service because the Federal Drug Administration definition of milk is the lacteal secretion, practically free from colostrum, obtained by the complete milking of one or more healthy cows. It has and continues to be a contentious issue. Other issues include countries claiming right to name origins like swiss cheese and dairy truck load rules.

Psychological Types: Practical Applications—Dr. Richard Grant

Even though I have taken multiple personality tests before, I was very excited about our last session in Austin taking the MBTI test, getting to see how my classmates scored and how my score had changed. Dr. Grant really took the results of the test a step further though and put practical application and understanding to our results that really put things into perspective. After leaving the session and heading to Sonora, I was riding with one of my fellow classmates as the navigator. Instead of turning left out of the hotel as I directed him to, he kept going straight. I told him he'd now have to take a block and extra turns and he should have just turned on the main street to which he replied, "Jen, your way was efficient, but mine is effective." We all laughed because with our different personality types, that is exactly what Dr. Grant told us not 30 minutes earlier.

Old Sonora Ice House Ranch Museum

On the way to Sonora, most of the class, sans the recently scored introverts who said they needed some alone time, ate in Fredericksburg at a great German food place, which Dr. Jim was big fan. We made it the rest of the way to Sonora and freshened up in time to head to the Old Sonora Ice House Ranch Museum, welcome to Sonora by Curry and Bonnie Lou Campbell, the sweetest couple in far West Texas. There Ms. Loraine gave us a tour of the museum that held relics from natives and area ranch families who settled the area, outlaws and early members of the sheep and goat raisers association. We then walked up the hill to the Historic Train Depot to prepare for dinner.

Historic Train Depot

As we waited for dinner, we were greeted with warm small town hospitality, which was refreshing after a week in the city of Austin. The Sonora Mayor Wanda Shurley attended among others and we were given a tremendous presentation by Mr. Bob Malone, President and CEO of the Sonora Bank and former VP of BP Energy. I think my classmates would agree we could have stayed and listened and asked questions back and forth with Mr. Malone all night if he would have let us. Walking away we were inspired with a take-home message to always stay true to ourselves, live by our values and to care for other people.

V. Saturday, January 21, 2017

Saturday morning we headed out extra early to the Sonora Research Station via bus and pulled up to a ranch heritage scene with a crew preparing a traditional chuckwagon breakfast around their 1920s wagon. Stepping off the bus into the crisp cool morning air, the sun was coming up on the horizon, and we were greeted with the smell of a campfire fire and hot cowboy coffee aroma boiling above the flames. After introductions, the camp cook rang the chime and yelled, "Come and get it!" We lined up for hot dutch oven biscuits, cinnamon rolls, gravy, eggs and sausage plus piping hot coffee. It was amazingly delicious, and I could have sat on the back side of the barn drinking coffee and watching the sun come up that slowly took away the low fog that morning, thick among the trees scattered across the fenced research farm's landscape.

Welcome & History of Sonora Research Station—Dr. Doug Tolleson, Associate Professor Sonora Research Station, Texas A&M AgriLife Extension

Dr. Tolleson, who heads up the Sonora station, has only been there since July, but the knowledge he possessed about the history of the station and the way he took ownership of the work done there was striking. Tolleson is only the fifth man in 100 years to run the Sonora station, which started in 1916. Big Head disease was the reason for its inception. The locals decided they needed a dance floor at one time, and the way they got it was convincing the station needed a concrete floor to sheer sheep and goats. The Ovine Ecthyma or Sore Mouth vaccine was developed at the Sonora station in the 1940s and is still in use today. It is also the longest continuing animal test location in the world for its tests on Rambouillet rams. The Merrill 4 pasture, 3 herd grazing system was developed at the Sonora station. The station also researches prescribed burning, feeds sheep, goats and cattle, breeds for goats that consume more juniper and does brand analysis to help mitigate cattle lost to rustling and changing brands. I was so impressed to hear all these key research findings were generated in Sonora.

TALT- Texas Agriculture Land Trust—Mr. James Oliver, TALL VII Alumnus with COO -Texas Agricultural Land Trust

Mr. Oliver spoke to us more about the Texas Agricultural Land Trust, expanding on Ms. Fitzsimons presentation to us earlier in the week. Mr. Oliver spoke to us about "agri-hoods"—self-sufficient neighborhoods that have organic farms with a farmer's market and educational

facilities. I had never heard of edible landscape specialists, but that is who approached him to create one of these neighborhoods. He talked about the changing landscape in agriculture and the fact he doesn't believe the next commissioner of agriculture will come from traditional agriculture, which I do not find surprising even though it is a little alarming to think about.

COO -Texas Agricultural Land Trust Water Conservation—Mr. Jim Polonis, Sutton County Underground Water District Manager

Out next speaker was Mr. Polonis who detailed the Sutton County Underground Water District and water districts and issues across the state of Texas. It was interesting to see the difference in how water moves and where it comes from in that part of Texas versus the Ogallala Aquifer I am more familiar with. It was interesting to learn evaporation is at 73-75 percent in that area of Texas and that some areas along incised river channels they can drill and get 500 gallons per minute then move 10 feet and only get 2.5—the water flow varying greatly.

Predation in Edwards Plateau and Hill Country Wildlife Services—Mr. Alan Armistead, District Supervisor with Wildlife Damage Management Specialist - Mobile Force

Mr. Armistead touched on an interesting aspect of agriculture production—managing predators, which is a significant issue for the sheep and goat raisers in West Texas. As a wildlife damage management specialists, he actively works to reduce natural predators such as coyotes, lions, feral hogs and wild dogs. Armistead deals with diseases like rabies and the bubonic plague. All 11 counties Mr. Armistead supervises have feral hogs, and there is an estimated 3.5 million in the state of Texas. Unsurprisingly, he said they remove 2000-2500 hogs each year without making a dent in the populations. He showed us traps like M44s to control coyotes, which we have used on our own farm in New Mexico. Mr. Armistead also talked about new technologies being looked at to control feral hogs similar to M44s for coyotes.

Joining Mr. Armistead was Mr. Stan Cottle, a member of the Preservation of South West Texas Wildlife and area rancher. The duties of the PSWTW are as follows:

- Preserve wildlife and livestock
- Help government trappers with ATV repair, baits and ammunition
- Help facilitate helicopters for hog control
- Establish a trapper apprentice program
- Advise predator control budgets on ranches

Diversity in Agriculture—Dr. Erika Campbell, Owner High Cross Vineyard and Mr. Stan Meador, Owner & TALL VIII Alumnus with X Bar Ranch

Dr. Erika Campbell spoke to us next. A sweet woman who was very smart, she detailed her diverse operation complete with wine grapes, goats, sheep, cattle and hunters. In order for the ranch to remain viable for both she and her husband, they added the wine grapes several years ago and are in their third harvest—the first to grow wine grapes in their region. Campbell

emphasized the Texas brand growing Texas grapes for Texas wine and credited Texas Tech University and Texas AgriLife for providing the knowledge on growing grapes she and her husband needed to be successful.

Mr. Stan Meador was our final speaker who also talked to us about diversity in agriculture. His family has ranched for 115 years, but going back to the ranch in a traditional sense was not what Mr. Meador had in mind. Transforming parts of the ranch in 1996 into the XBar Ranch Nature Retreat, his family now has eight cabins, special events, mountain bike races and astronomy events along with an active hunting program that have transformed the ranch. What I found most interesting was the concept for the nature retreat deriving from Meador's decision to not make the ranch like a bread and breakfast where people come to see him. He took a very hands off approach, and visitors use the facilities without a lot of rules.

Tour of Facilities and Prescribed Burning

After our speakers, we had the opportunity to walk to some of the sheep and goat pens outside and see the area's popular angora goats, along with dorper and rambouillet sheep. We then loaded the bus for a quick tour of the prescribed burning areas where Tolleson and Mr. Ralph Mayer showed us the unique differences between prescribed burning intervals and hand clearing locations.

JL Bar Ranch & Resort

We couldn't have asked for a more perfect ending to our Sonora trip with time spent at the JL Bar Ranch and Resort. After a quick tour of the ranch's impressive deer breeding facility where we saw monster bucks priced up to \$15,000 a piece, we traveled to the resort for evening festivities and dinner. We were greeted by the most hospitable staff and toured the facility, even getting to step onto Mr. Archer's, the owner, jet, which had just returned from the president's inauguration in Washington, D.C. Mr. Archer started the company Multi-Chem Group, LLC out of his garage in Midland in 1993. In 2011, he sold Multi-Chem to Haliburton, and Mr. Archer continues to manage Multi-Chem to this day. We had the best time at the JL Bar Ranch & Resort, and I could not be more grateful for the hospitality shown to us there by the staff, James and Linda Tolleson, Curry and Bonnie Lou Campbell and Mr. Ralph Mayer and Robert Mayer.

Closing Reflections

While it was a long week, I grow increasingly thankful for the opportunity I have been given to be a part of TALL XV. I learned so much in Austin and Sonora, and even though the Sonora portion of our trip was optional, I'm extremely grateful I chose to go and had the opportunity to meet the great people there. This was my favorite session to date even though I think I feel that way after every one of them, and I cannot wait for the next session in April.