



**TALL Class XV
Session Two
Lubbock, Amarillo Texas**

Tom Miller #20

Production, Producers, Progress

The second session of TALL Class XV was in the bread basket of Texas. The first place we were meeting the class was going to be at Lubbock, Texas. After a seven-hour drive from East Texas I would like to quote Mac Davis when he sang, "But now happiness is Lubbock, Texas, Growing nearer and dearer And the vision is getting clearer, In my dreams". The title is fitting, but they forgot to mention the people. The people of the Panhandle are a big part of why this area is so great.



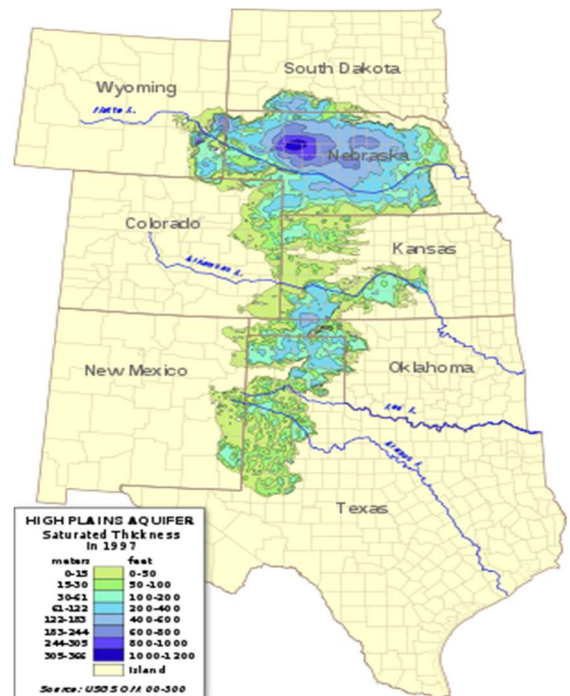
Lubbock Texas was founded in 1876 and Texas Tech was founded in 1927. I also learned every tree was planted and somebody must have wanted it there. The area, located in the center of the South Plains, is the largest contiguous cotton-growing region in the world, with acreage exceeding 3 million in some years.

All of the ground water in this area comes from the Ogallala Aquifer. The Ogallala Aquifer is a shallow water table aquifer beneath the Great Plains and one of the largest aquifers in the world. The South Plains

area is over the beaches of the aquifer, which is the shallower side of the aquifer. The issue with the aquifer it is slow to recharge and the region over the aquifer is some of our most productive farming land in the United States. With farming being such an economic contributor to the area all of our speakers were very aware of the value of water.

*"When the well is dry we will know the worth of water"-
Benjamin Franklin.*

After four days in the area, it safe to say that agricultural community is very aware of what water is worth now. Water conservation has clearly become a focal point.





PYCO Oil Mill

The first morning we load the bus, count off, and away we go. We are headed to PYCO. PYCO Industries is the largest cottonseed cooperative with over 90 member gins. The company has been around since 1938. The main focus is cottonseed oil. Cottonseed oil is used in snack food. It is the preferred cooking oil for this industry because it does not change the flavor of the food to the oil it is cooked in. If the oil is further refined, it is used as salad oil. Some bi-products produced from oil production are linters, whole seed, hulls and meal. Whole seed, hulls and meal are a good feed source for dairy and beef cattle. This is lucky because there are a lot of cattle in this area of Texas. The coop purchased a rail company, the



Plainsman Switching Company, to help move their product. They are a benefit to all the farmers, and the communities they live in to help bring more value to the crop they grow.

Drip Irrigation Cotton Field-Heinrich Brother Farms

After leaving the oil seed mill we were off to go check on some cotton crop. Just like real farmers, we got to enjoy a great sun rise in the field. We toured a drip

irrigation cotton field on the Heinrich Brother Farms. Burt Heinrich explained to us how the drip irrigation worked. It is in the ground and covered up to eliminate evaporation when irrigating. They installed the first system in 1999 and one of the first farms to install drip irrigation in the area. Heinrich knew the value of water farming in an area with around 15 inches of annual rain fall a year they used the drip irrigation to protecting the Ogallala supply and not wasting this valued resource.



Lubbock Cotton Growers Co-op Gin

After cotton leaves the farm it heads to the gin and so did we. The next stop was the Lubbock Cotton Growers Co-op. This Co-op has been ginning for around 75 years they gin for around 50 producer members. The gin works hard to perform a high quality ginning, obtain the highest price possible for both cotton and seed, and to then share the profits with its members. The gin was a state of the art ginning facility and was at capacity. Jerry Butman, the general manager, said they were going to add a night shift as they go into harvest. Given their schedule, they were very generous to fit in a tour of the cotton being ginned for all of us.



Fiber & Biopolymer Research Institute



After leaving the gin we went to the Fiber and Biopolymers Research institute. This is a research facility for cotton. Dr. Dean Etheridge, the institute's managing director, gave us a tour of the facility. The goal of the research center is to help increase the value of cotton with the help of manufacturers and cotton breeders. We toured the Cotton Phonemics and Spinning lab. All the equipment was state-of-the-art, and the employees all seemed very happy and pleased to answer question from the group.



Texas Tech-Animal & Food Science Building

Wreck 'Em Tech, Guns Up-- we were on our way to where we had lunch and area of speakers.

The Interim Dean of the College of Agricultural Services and Natural Resources, Dr. Steve Frazee, welcomed us. Mark Brown, the Lubbock County Extension Agent, gave us an overview of the South Plains Agriculture and its overall impact on the Texas Economy. After that, we heard from the commodity groups in the area. They explain how they used voluntary member funding and the purpose they serve. One interesting thing was that commodity check off dollars are only used for promotion or education of the product and can't be used to lobby. All the speakers agreed that we need to promote agriculture and be a voice at every opportunity.

Getting a tour of the Animal Science Department was impressive. The students in the student seemed very pleased... and why won't they be? The walls were covered with trophy's and banners from every kind of judging to every kind of horse completion. I was very impressed with the campus and can say the campus was full of the right kind of energy.

USDA-Agricultural Research Center

At the USDA Agricultural Research Center, we learned about all the research they did. You guessed it... they did research in cotton. They also researched all types of irrigation methods. The take away message for me was that the most effective research occurs when all these agencies and the university work together to solve issues.



granted all the things in life big and little.

Bayer Museum of Agriculture

That night we had a program at the Bayer Museum of Agriculture. We had some time to walk around and read about the history of agriculture. It was a great time to visit with people who have a true passion for agriculture. We were at the museum for the honorary Recognition of Barry Evans, he did a great speech about life and how we need not take for



Diamond Ethanol Plant

Day 2 - Off we go to the Diamond Ethanol Plant early in the morning, got to love those west Texas sun rises. The plant was started in 2012. It uses sorghum and turns it into fuel. I was impressed with the distiller's grain and the pelleting of the product. After we had returned from our trip, I told some of the ranchers in my area that the pellet was getting over 30 percent protein, and over 10 percent fat content and the

price FOB-Levelland. Before I left the table with these ranchers they had called the plant , bought a load, and set up a truck for delivery.

Muleshoe Animal Clinic & Muleshoe Vet Supply

At the Vet Clinic Steve Kennedy, DVM and owner, was there to greet us. He talked a little about how hard it is to keep vets on staff. Large animal vets starting out in rural areas tend not to make enough money to cover the student loan debt they have after leaving vet school. The clinic does lots of work with the dairies in the area. They also supply chemicals and supplies to the dairies. Dr. Kennedy said that in the '80s there was only two dairies in the area and now there is close to 450,000 cows in the area between New Mexico and Texas.



Stonegate Farms Dairy

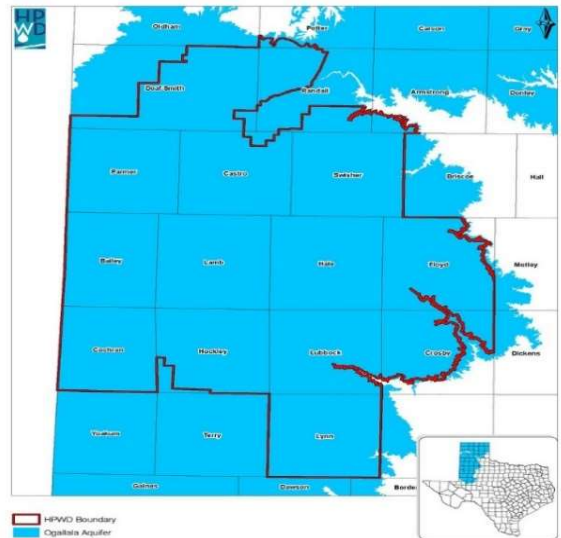
After leaving the vet clinic we headed down the road to Stonegate Farms Dairy, where owner Joe Osterkamp met us. Osterkamp provided a tour of the dairy barn and allowed us to go in the pit area where they milked the cows. The milk barn was a parallel milk barn, which means the milk machines are put on the cows from the back and the cows stand side by side. His family came to Muleshoe in 2005 from California so they could expand their dairy, lower



feed costs, and have fewer issues with urban encroachment. Stonegate is a family farm. Osterkamp's father and brother all take an active role in the day-to-day operation and management. The dairy milks about 3,000 head two-times a day and is almost 100 percent Holstein. Some of the major issues facing dairies in the area are water, labor and dealing with the lingering effects of the huge blizzard, named Goliath, that hit in December of 2015. Joe said that the water on the dairy is recycled at least three time before being used on the crops, which are used for feed.

High Plains Underground Water District

We had a great lunch at Granddaddy's Restaurant and listened to a great speaker, Jason Coleman who is the manager of the High Plains Underground Water District (HPUWD). The water district was created in 1951 and its mission is to protect, preserve, and conserve aquifers in its district. He explained that the HPUWD is governed by a board of five who are elected by members within the district.



Bamert Seed



of the seed Bamert sells is produced on Bamert farms.

We loaded the bus and headed to the farm of one of our TALL class mate's. Brett Bamert's family operated seed farm, Bamert Seed. The farm has been family owned since 1951 and now offers over 500 varieties and species of native grasses, wildflowers, forbs, and legumes. These seeds are used for all types of reclamation and re-vegetation projects. More recently, the seed is being used for biofuel production. We learned that approximately 85%

Burch Family Vineyards

From Muleshoe, we headed to Friona to the Burch Family Vineyards. The Vineyard is owned by Keith and Brenna. Keith is a third generation farmer in the area. His wife Brenna has a degree in chemical engineering from Texas Tech. In 2011 after the drought they wanted to diversify the operation. They had always wanted to own a vineyard, so they attended a Wine and Grape Growers Association meeting. They planted the first acreage in 2014 and have added new vines every year. They use



drip irrigation on the vineyard. I was very impressed with Keith's ag-engineering skills. He built a planter and modified farm equipment to be used in the wine operation.

Caviness Beef Packers

After loading the bus, we headed north to Hereford. We were going to tour Caviness beef packing facility. The packer is a family owned packing facility with the third generation family members in active roles. A high percentage of the 1,700 cattle harvested daily are cull dairy cattle. They do also harvest a percentage of prime graded, high end specialty with value added ranging with labels from Farm Fresh, Top Shelf Amarillo. They did explain how they used different color helmets for the employees so that they know who is less than 90 days employed. This helps make

sure that more experienced workers will help the new employees and have patience with them. They also will have a recognition party for them when they reach the 90 days of employment.



Scott Seed

After leaving Caviness, we travelled to Hereford, Texas. Here, we ended our Lubbock/Amarillo session with a tour and presentation at Scott Seed Company. This is a family-owned business that was started in 1946. We heard from owners, Coby and Chad Kriegshauser. The company produces seeds at its nurseries in Texas and Cost Rica. They grow varieties of sorghum, hybrid forages, millets, small grains and hard red winter wheat, rye and tricale. After hearing about the company and handling some of the

sorghum varieties, we toured the facility. They showed us seed being cleaned, sorted, and packaged. They said that some of their success is that they are willing to change and make new product to give the customer what they want.



While at Scott Seed, we enjoyed some wonderful hamburgers and Polish soda water. Again, the people are great in the Panhandle.

Timber Creek Vet Clinic

Gregg Veneklasen, D.V.M. was great! I think I could have stayed for a week and not seen everything I wanted. One of the reasons I loved this is because me, my wife, my kids, and my in-laws are horse people. Looking at the pictures and autographs in the office, you had to be impressed with the people that Dr. Gregg has worked with. He started with a discussion of how he can clean DNA and turn off certain genes. Then he talked about how he cloned champion racing, bucking and cutting horse. I appreciated his personality, and humor. To quote him, "if you want to get rich you need to figure out how to make a dog live 40 years". He said the biggest impediment to the technology is that we will have to wait until the next generation to get to a point where people accept the technology. He used an example about the cell phone very few people know how it works but try to take it away and now, nobody can get through the day without it. Dr. Gregg Veneklasen is an example of a person who never stops asking questions and never stops wanting to learn more and improve on his ideas.



WTAMU College of Agriculture and Natural Sciences (Nance Ranch)

West Texas (WT) Let's Go Buffs Go. This was great. I think I have told everybody back home about WT. Dr. Lawrence and his team took a prime carcass, or a really high quality ribeye, and made a bull. The cool thing is they have checked two of the offspring and they both grade prime and they had a 15 inch ribeye. The cattle live weight was 750 pounds, compared to the industry's normal approach is to feed a steer to over 900 lbs for a 15 inch ribeye. This will change the way we feed cattle in my life time, they are going to create the same high quality product with less water, grain and less of a carbon footprint.



Xcel Energy Plant Tour and Lunch

We had a great lunch and got to tour the Xcel Energy plant. Xcel Energy provides power to the Western and Midwestern states. They are striving to provide a safe, clean, reliable energy that the customer needs. They utilize coal, wind and natural gas to create power. We had a tour of the coal plant and I was impressed with the cleanliness of the plant, the employees showed real ownership and pride in the plant.



WTAMU Classroom

We had three speakers at the WT downtown classroom.

First was Dean Hawkins, Ph.D from WT. WT has a lot of exciting things going on in the College of Agriculture with the plans in place for a new building. They also said that WT has the highest ratio of agricultural students to total student enrollment.

The second speaker was Ross Wilson with the Texas Cattle Feeders Association. This organization represents the cattle feeding area in this three state region. Approximately 28 percent of the fed cattle in the US are fed here. TCFA works to advance the economic, political, and social interest of the fed cattle industry. They provide many services, including government relations, market information, beef quality education, environmental services, employee safety, communications, and research and youth programs. In the '60s cattle feed yards began to pop up in the region. Before that, most cattle from the area were sent to be feed in California and Arizona. TCFA was created in the 1967 to serve the needs of the growing industry.

The third speaker was Rodney Mosier from Texas Wheat Producers Association. This is a voluntary membership organization of wheat producers. It was started in 1950 and if you're a member of the Texas association you will also be a member of the National Association of Wheat Growers.



Cargill and Cattle Feeders

At Cargill Cattle Feeders and South Plains Compost we took a bus tour around the feed yard. Cargill feeds only Cargill Cattle, and their goal is to feed them out to 725lbs. For carcasses, the goal is for 50 percent of the

cattle carcasses to grade choice.

South Plains Compost

South Plain Compost uses the manure from the feed yard to make fertilizer for the farmers in the area. South Plains Compost facilities and equipment are located on Cargill property which allows the company to efficiently utilize the material from Cargill Cattle Feeders. South Plains Compost will also provide a service to spread the fertilizer in the field.



Cargill Sweet Bran

We stopped at Cargill's Sweet Bran feed production facility. Sweet Bran is a content feed that is made from ingredients of the wet corn milling process. For dairy cattle they said that the feed will need to be fed on a 45% of dry matter. The farmers then will add the high quality forage with the ration to make a complete TMR ration for the cattle. The producers who are using it are impressed with the consistency of the ration that is being fed to the cattle. While there, we watched them unload a rail car the same way I would unload my toy trucks when I was a kid. They took a rail car that was on the tracks, lifted it, then twisted it, turned it upside down to empty it. For a large company, it was apparent that the employees were happy, very positive, and very proud of the Cargill name.

Final Thought

"Producers, Production, Progress" and People, the people in the area are the greatest asset. The region is very dependent on agriculture and very proud of the fact that they are good at producing food. The people in the area know the importance of water and all the natural resource. The Texas Panhandle economy is an example of how an economy should work together, all of the different tours we did utilize each other in one way or another to help recycle, reuse and recreate. It brings tremendous value to the area.

This is one of my favorite areas and may be my favorite trip. If you start out the day with a great sunrise, end the day with a great sunset, and hang around good people you just can't go wrong.