

Monday, January 22, 2018 Texas Fresh Water Fisheries Center, Tyler, TX:

We began our Tyler trip at the Texas Fresh Water Fishers Center where we heard from Kevin Proctor, a cow-calf operator, Rebecca Zellers, the marketing director of the Center and Dr. Debbie Wade, one of the scientist at the Fishery. Fishing in Texas is a \$5 billion activity, and bass fishing brings in the majority of those proceeds. We learned carp are becoming a popular game fish as is the alligator gar.

This facility is primarily a bass facility. This hatchery stocks less than 100-acre lakes, the majority of which are usually 10 to15-acre tanks. Their biggest issue is dealing with the birds eating their fish. This facility only stocks public waters with game fish.

While at the Center, we also heard from Aaron Sumrall, County Extension Agent in Newton County, Texas. Dr. Sumrall discussed the feral hog issue. We learned feral hogs were introduced to the New World in 1539 as a food source by De Soto. The hogs made it to Texas in the 1680s, and their population explosion began in the 1930s because of the Depression (people turned their domestic hogs loose because they couldn't afford to feed them) and imported Russian boar for hunting opportunities. The Russian boar and domestic hogs began crossing (hybrid vigor), and their offspring are very resilient.

Feral hogs are in 246 of the 254 counties in Texas and have caused \$52 million in agricultural damage. They increase their population by 25% every 5 years. Every hog causes \$200 in damage every year and have a 4 to 5-year life expectancy. They have a high reproductive rate (average litter size is 4-6, and they produce1.5 litters per year).

Wild pigs cause \$2 billion per year in national damages. Texas economic damage is in the range of \$500-750 million. Increasing economic damage is associated with disease, and there are no definitive tangible estimates in areas of loss related to insurance claims. Other associated impacts and concerns are the following: ecosystem processes (ex: topsoil), native species (ex: hogs killing wildlife), livestock impacts, disease vectors related to human bio hazard, land fragmentation, public opinion, and food safety concerns.

We ended the day with a dinner and social hosted by Darren Rozell and Rozell Sprayer MFG, Company, where we heard from Pete Bonds who discussed various aspects of the beef industry and opportunities within China.

Tuesday, January 23, 2018

Scotts Miracle Gro, Tyler, TX:

Tuesday morning began at Scotts Miracle Grow, where we heard from Mr. Tony Chavez. The

company started in 1868 and is the world's largest lawn care company. Sales at the facility we visited are at approximately \$21 million per year and gross margins are approximately \$6.7 million. An interesting fact we learned is that when the economy is bad, Scott's does better because people stay home and take care of their yards instead of taking vacations. The company has 34 facilities nationwide, 3 of which are located within Texas.

The majority of Tyler is automated, so they don't have as many associates as other facilities. The company owns both the land and the facilities. They ship more truck loads than Wal Mart does and have 88 SKUs for distributors such as Wal Mart, Costco, Lowe's, Home Depot, Tractor Supply, and mom and pop shops.



Cavender's Boot City, Tyler, TX:

From Scotts, we then traveled to Cavender's Boot City to hear the Cavender's story and receive an overview of Smith County agriculture from Clint Perkins, the Smith County Extension Agent. We learned hay production brings in \$10 million to the county, and the nursery industry brings in \$125 million.

Cotton and China Industry Update, Tyler, TX:

From Cavender's, we then traveled to Rozell Sprayer MFG again where we heard from Mr. Pat Pilgrim, who runs a 150,000-bale cotton gin. His dad started Pilgrim's Pride in 1955. He discussed with us the family's involvement in both the chicken and farming industries and their experience exporting products worldwide.

"China is a huge consumer, and they are ready for these agricultural products. China is moving over more to a food-based market, and the Indonesian countries are coming up as the textile market." "It takes 1 bale of US cotton to spin with 2 of China's cotton to make it a marketable product." He also spoke to us about China moving their facilities to the Indonesian countries to reduce labor costs. "China is even looking at spinning wheels in the US because of lower interest rates and higher technology."

He discussed how important it is for "ag people to cut out every arm that we can. We have to pull our synergies together." "You have to focus on what your customer wants. Without a customer you don't have a business."

Lone Star Rose Nursery, Tyler, TX:

From there we went to Lone Star Rose Nursery where we had lunch sponsored by Lone Star Rose Nursery, Inc. and Ted Conover. We received a rose industry overview from Ed Borger, General Manager of the nursery. We learned how roses are sold by grade, and we also discussed with them their biggest issue – labor.

John Soules Foods, Tyler, TX:

From the nursery we traveled to John Soules Foods, where we heard from Tom Ellis, the Executive Vice President and Chief Operating Officer. One of their mottos is "Fresh ideas. Innovative.



Responsive. Your Partner."

The company has over 1,200 employees and produces one-half billion in sales. They also have a facility in Gainesville, Georgia.

We toured the meat processing facility and saw the raw products, to the marinated products,

to the cooked, chopped, bagged and boxed products. The final product is sold in retail markets, food service distribution centers, convenient stores, military, and international accounts.

Their core product line is fajitas, and it is the first plant to install x-ray machines at the slaughter plant. They have two x-rays at the processing plant for chicken – the first used before the product is split (when raw) and the second after it is bagged to check for metal. Samples of the product are also sent to a lab in Dallas to test for various pathogens. They hold the product until they receive negative results from these tests then release the product into commerce. They have many standards in place to prevent cross contamination (raw and cooked product). Originally, they were a 100% beef company, but have now moved to 80/20 chicken/beef. Consistent product quality and consistent customer service is how they have built the relationships in the market place.

Hollytree Country Club, Tyler, TX:

We ended Tuesday night with a social and reception at the Hollytree Country Club provided by Build East Texas, where we heard from the Honorable Bryan Hughes, State Senator, District 11.

Wednesday, January 24, 2018

Brookshire's Fresh Store and Brookshire's Grocery Warehouse:

We began Wednesday morning with breakfast at Brookshire's Fresh Store. From there we traveled to Brookshire's Grocery Warehouse. Brookshire's first store was built in Tyler in 1928. The warehouse we visited handles all of Brookshire's perishables. They ship 28,000 pallets per day and run 24/7 except on Thanksgiving and Christmas. Brookshire's has 178 stores total, with the furthest store west being located in Sweetwater, Texas. They also have stores in Louisiana and Arkansas. They load 90-100 trucks out of the warehouse we visited per day, and two years ago they switched to an all LED system, which saves them a tremendous amount of energy.

We also were able to see the banana ripening process at the warehouse. They ripen about 1,000 bananas a night. The bananas come in green then go through a gas processing system to ripen then (this process is a natural process that is just hastened so the consumer can enjoy the end-product more quickly). They are also going to start ripening avocados using this process as well. We learned their regular bananas are imported from Guatemala and their organic bananas are imported from Columbia. Each facility has to keep all regular and organic products completely segregated. It takes approximately 4 days to go through the ripening process.

Brookshire's has their own trucking company as well. All products going to their grocery stores from their distribution centers are hauled with their trucks. They also have generators in place to handle lighting if the electricity goes down. We again discussed that labor is one of their primary issues – "Finding someone who can pass a drug test is hard." However, the biggest thing they have to worry about is keeping their customer base. They help combat this by lowering their margins in their stores by buying through sales groups.

Color Spot Nurseries, Inc., Troup, TX:

From Brookshire's we traveled to Color Spot Nurseries, an active greenhouse facility, where we heard from Mr. David Newborn. The nursery was acquired in 2007, from a private owner. The company has locations in California and Texas. The facility we visited has approximately 5.5 million square feet of growing space. Their main accounts are Wal Mart and Home Depot, but they also supply to some of the Brookshire's stores and mom-and-pop stores. Sixty-five percent of the company's income is derived from bedding crops. They also bring in approximately \$1.3 million in the sale of poinsettias. They sell their products in Texas, Oklahoma, Louisiana, and Arkansas. They too handle all of their own shipping.

Stephen F. Austin State University - Poultry Research Center, Nacogdoches, TX:

We next traveled to Stephen F. Austin's Poultry Research Center, where we had a wonderful fried chicken and catfish lunch sponsored by Texas Farm Credit and the Nacogdoches County Ag and Natural Resource Committee. We received an SFASU Agriculture Department overview from Joey Bray. The Research Center has a 23,900 bird/house capacity and has 4 commercial tunnel ventilated broiler houses (they produce approximately 575,000 broilers annually). They also have a research feed mill. We learned Nacogdoches County's largest income is derived from the poultry industry. Next to poultry are cattle and timber.

We also heard from David Alders, a broiler grower and cattle producer, who discussed with us the poultry production process and associated consumer demands. We learned the chicken industry began as people kept chicks for eggs and occasional Sunday dinners. Mrs. Wilmer Steele was instrumental in growing the chicken industry in the 1920s. In the 1940s, feed mills, hatcheries, farms and processors were all separate entities. In the 1950s the commercial broiler industry began its economic boom. The contract broiler relationship developed as a response to a number of farmers losing their farms due to the risks invoked in financing chicks and feed, hence vertical integration began. By the mid-1960s, 90% of broilers became a fully vertically integrated system. He said chicken consumption surpassed beef consumption in the US in 1992 (chicken had already surpassed pork consumption by 1985).

He said a vertically integrated poultry farm includes the following operations: feed (corn, soybean meal, other), feed mill, mixed feed ration, breeder farm, hatching eggs, hatchery, broiler chickens, grow out house, market ready broilers, processing plant, further processing, byproducts, and rendering plant.

The three largest companies in East Texas involved in the vertically integrated poultry business are the following: Pilgrim's Pride, Tyson and Sanderson. The US has the largest broiler chicken industry in the world and exports 17% of its poultry products. Georgia is the number one producer of broiler production; Texas is number 6. Shelby County and Nacogdoches County are in the top 10 boiler production counties in the nation.

As of May 2017, 42% of the US broiler market was raised without antibiotics. He informed us that the lack of antibiotics has increased poultry mortality ranges between 24-25%, while the grow out time is 3-4 times longer and the cycle time is increased by 21-29%. If the entire US market moved to antibiotic-free poultry, 680 million to 880 million more birds would be needed to provide the same amount of meat. Feeding and watering those birds would require 3,900 to 5,200 square miles of additional land for crop farming and 1.9 to 3 billion more gallons of fresh water. The same birds would product 4.6 to 6.1 million more tons of manure. "To date, Sanderson is the only company that hasn't caved to the consumer demand for antibiotic-free birds."

Pilgrim's Pride Facility, Nacogdoches, TX:

From Stephen F. Austin, we traveled to the Pilgrim's Pride processing facility in Nacogdoches. This facility employs approximately 1,500 workers locally with 1,300 plus working on the processing side. They process approximately 1.5 million birds per week and have invested about \$45 million recently in new equipment for their de-boning plant. Pilgrim's Pride places birds in approximately 1,200 houses in 220 farms in a 7-county area. We also learned that birds are sexed by their feathers and are kept segregated for sizing purposes. Pilgrim's Pride also has labor-related issues and have begun a referral program for their employees, along with various other employee benefit packages to help combat this.

Texas Farm Products, Nacogdoches, TX:

From Pilgrim's Pride we traveled to Texas Farm Products, where we heard from Mr. Bud Wright, President and CEO. The company was founded by his grandfather in January 1930 as primarily a livestock feed business (mainly cattle and horse) and pet food (about 95% of which is private label

done for other companies). They ship about 200 trucks of product per week, and their ingredients come in by truck or rail. The facility runs 24/7 with four shifts per 24-hour periods. They also have their own in-house quality control lab. Purina, Tractor Supply and HEB are some of their largest customers. It is interesting (and sad) to see how much more stringent their food safety measures were than the food safety procedures for human consumption.

Bugscuffle Inn & Retreat Center, Cushing, TX:

From Texas Farm Products, we headed to Bugscuffle Inn and Retreat Center. Our dinner was sponsored by the Texas Forestry Association and the Texas Logging Council. During dinner we received an overview of the forestry industry in East Texas from Wes Moorehead, East Texas Forestry Operations Department Head. He said the Texas A&M Forest Service has 23 offices over 54 counties in East Texas. There are approximately 12 million acres of forestry in East Texas.

East Texas forest land ownership is owned 24% by institutional investors who sell timber to mills. (as there are various tax advantages for mills not to own the land) and non-industrial private forest

comprise the remaining 65%.

The first crop can be up to 600 trees per acre, and by age 25-30 they will do the final harvest. We learned a tree is cut three times during its life cycle, the first for pulp (paper), the second for OSB and pulp and maybe 2x4s and the third time for dimensional lumber and plywood (which



is where the money is made).

The forestry industry has a direct economic impact of \$18.4 billion in industry output and provides for 60,000 direct jobs with payroll of \$3.7 billion. Timber is the ninth most valuable agricultural commodity in Texas.

Thursday, January 25, 2018

Hancock Forest Management, Cushing, TX:

Thursday morning began with an in-field tour of a harvesting operation. We heard from Trevor Terry, Regional Manager of Hancock Forest Management, which is the world's largest timber investment management organization. The company pools money together to build funds and

invest in timberlands, and once purchased they manage the forestry property for their client's return on investment (i.e., the property is owned by Real Estate Investment Trusts). Such trusts see a historic 10% return on investment. They invest in properties in North America, New Zealand, Australia and Asia, and their home office is in Boston. Manual Life is their parent company and is traded on the public stock exchange in Canada. The majority of the properties they manage are worth greater than \$100 million.

We learned that in harvesting the timber, they can cut 5 acres of timber per day and produce 100-130 loads per week (1 load equals 28 tons). They average 90 tons per acre. They use a liquid herbicide and a granular fertilizer. We also learned that the mills require a log to be at least 6 inches wide at the top before they will accept a log.

The majority of the timber mills now claim no connect between the raw material lumber and the end product. Mills typically work year-round. The Real Estate Investment Trusts own the logs until they are weighed at the mill. We discussed how housing drives a lot of the market for hard wood products. "Fiber per acre is how we are paid. The more trees per acre we have the better. Burning is one of the best management tools, but it's so expensive and has such a high liability that few do it anymore."

We also heard from Tim Rodriguez an independent contractor who supplies the labor and equipment to harvest the timber. He said they can get about 20,000 hours out of their loaders (which equates to about a 10-year life span). He said loaders cost about \$250,000, and sliders costs \$325,000 and also last about 10 years.

Norbord OSB Mill, Nacogdoches, TX:

From there, we traveled to Norbord OSB Mill where we heard from Phil Ferguson. Phil explained to us that the mill doesn't own any of the wood. "We contract all of the wood out." They handle mostly all pine, but sometimes have some sweet gum come

though (less than 1%).

The Norbord company has two locations in Texas, and they also have locations in Alabama, South Carolina, Georgia, Minnesota, Canada and Europe. The mill runs 24/7 and will shut down every two weeks for 8-10 hours of regularly scheduled maintenance.



This particular mill bought 689 million tons of wood last year to make OSB. They will take first, second and third thinnings to produce the product.

ArborGen Nursery, Bullard, TX:

Following our time at the mill, we traveled to ArborGen Nursery, where we heard from Gene Bickerstaff, the Nursery Manager. This particular nursery harvests 1.3 million seedlings per day. The company's headquarters is based in South Carolina. They plant oats and pearl millet as cover

crops in the off seasons. They fumigate in the fall before the spring planting and apply fertilizer after soil samples are taken. Planting occurs in March and April. They plant the seeds no more than a quarter of an inch apart, and the irrigation system is placed 58 feet apart with 9 beds between each line. They are completely automated with electro-mechanical controllers. They top prune the seedlings in mid-July through September to maintain seedling height uniformity and undercut the seedlings to cut tap roots in October for a more uniform crop. They also laterally prune the roots in early November before the seedlings are picked up.

After harvesting, they can store the seedlings in a freezer, but the amount of time they can leave them in the freezer depends on what type of seedling it is and how cold the freezer temperature is kept. If the temperature stays below 34°F they can store the seedlings there for 6 weeks or longer.

We also toured the pine packing shed, cooler and loading dock while at the facility and learned that ArborGen is the leading seedling producer with 390 million trees per year. The company has global operations in the Southern US, Brazil, New Zealand and Australia. They grow using both a bareroot nursery system and a containerized nursery system. They also produce their own seeds and have over 809 active field trials in the Southern US. Certain traits they look for are (1) growth rate (50%), (2) rust resistance (20%), (3) stem straightness (20%), and (4) forking (10%). They estimate that it takes 14 years to take a new variety to market.

Friday, January 26, 2018

"Character Driven Success":

We concluded the Tyler/East Texas trip on Friday with an overview of character driven success given by Dr. Beverly Chiodo, Professor, Department of Management, Texas State University. Dr. Chiodo made excellent points regarding morals and character that we can all associate with and transfer to our business practices. She left us with the following that we will all do well to remember – "What you praise is what you get!"

Conclusion

This trip was an excellent refresher of some very major points. First, labor as a whole seems to be a nationwide issue, and an even greater issue for those of us in the agricultural world. We cannot do what we do without the necessary labor to support it. Secondly, if we are going to survive and be successful, we must become vertically integrated to the extent we can. Two of the biggest things that hit home for me during this trip were the following: (1) without a customer you don't have a business, so you have to focus on what your customer wants; and (2) consistent product quality and consistent customer service is key to building and maintaining customer relations.

Shane Halfmann

Session 7

January 22

I can't believe that we are starting our seventh session. These two years have gone by extremely fast and I always enjoy catching up with everyone. I have been looking forward to this session as I have not spent much time east of Interstate 45. The individuals scheduling our speakers did a great job highlighting the agriculture sectors important to this region.

Our week began at the Texas Freshwater Fisheries Center in Athens. This is a beautiful facility dedicated to education, recreation and producing hatchlings which stock lakes across Texas. Our first speaker was Dr. Aaron Somrall the Newton County extension agent. He spoke to us about the effect wild hogs have on our state. Dr. Somrall has conducted extensive research on this invasive species and provided staggering numbers. The state of Texas currently supports 2.6 million hogs, each causing \$200 of damage per year. This equates to 500 to 700 million in damage. There are however larger issues created by these animals. Food safety, water quality, soil erosion and disease are just a few examples. There are currently several toxicants being researched to help control these animals but activist groups, hugs for pigs and Texas Pig Hunter Association, are keeping these from being utilized.

Debbie Wade then spoke to us about the Fisheries mission and gave a tour of the facility. I was surprised how many people were able to fish the ponds located on the property. She explained that fishing is a five billion dollar industry in our state and bass fishing is the most popular. The Athens location is the main hatcher for bass in the state producing seven million hatchlings for restocking purposes each year. We all got a kick out of Dr. Debbie's hatred for the cormorant. These birds eat a lot of fish and love stalking the hatchery.

We were treated to an awesome steak at Rozell Sprayer by Mr. Darren Rozell. Dinner was followed by an interactive presentation by Mr. Pete Bonds. Mr. Bonds spoke to the group about their stocker cattle business and how they are able to be successful. I agree with many of his business models and learned a lot from these conversations. It was very informative and we shared several laughs as well.

January 23

Our first full day of this session started early with a tour of Scott's Miracle Gro in Tyler. Mr. Tony Chavez has managed this plant from day one and was very proud of the plant. They mix soil used in various applications for a wide range of retailers. I was surprised to learn that Scott's best years happen when the economy is poor. The theory is simple – when people are struggling financially they stay home rather than spending money on toys or vacations. I was also surprised to learn that Scott's has a no tobacco policy to keep health care costs in check. I had been looking forward to Mr. Pat Pilgram's portion of our session. I have been intrigued with his theory to change the cotton industry by vertically integrating the many different stages of ownership. Mr. Pilgram's farming career began as a means to dispose of chicken litter. His family grew corn, milo and cotton. More recently Mr Pilgram leveraged his contacts in China to find a market for cotton produced in Texas. These relationships are paying dividends as the surplus cotton in China is becoming harder to spin and less valuable. This year Mr. Pilgram will handle 75 thousand acres of cotton in East Texas and gin 150 thousand bales.

We were then treated to lunch at the Lone Star Rose Nursery. Roses have historically been an important part of the Tyler economy and today is no different. Mr. Ed Border gave us an in depth look at the history of the rose industry. Over the years roses have been developed to be more resistant to diseases. Thus, making these plants more manageable for the average home owner. More recently continuously blooming roses have been developed making the knockout variety even more popular. We also toured a facility where the roses are trimmed and packaged for individual sale.

Poultry production is very important to the economy of East Texas. John Soules Foods is a plant that produces value added chicken products for direct sale or the restaurant industry. We received a tour of the plant and were able to visit with Tom Ellis, the executive vice president. The plant was very impressive. Both employees and equipment were clean and organized. One and a half million pounds of chicken are processed in this location each week. Mr. Ellis spoke to us about the business and the global protein market.

Our evening ended with a reception at the Hollytree Country Club in Tyler. Several people were recognized for their service to TALL or the Agriculture Community. I was especially proud of my TALL XV classmate, Kyle Watts who is the sitting chairman for Better East Texas.

January 24

I don't think of retail grocery as an Agriculture business. However, without these locations products could not reach the consumer. Brookshire's Grocery is one of these locations dedicated to providing quality, fresh products. We visited the main warehouse were products are stored and distributed. This location helps supply 178 stores between Sweetwater and Monroe Arkansas. The facility was very impressive. I especially liked the vaults where the bananas are ripened. Over a four-day period Ethelene is used to ripen truckloads of bananas. After learning about the distribution process, we visited one of Brookshire's Fresh Stores. I was jealous not to have one of these locations where I live. The produce and meat department was stocked with very unique and fresh items. They also provide a wide array of items already prepared, all look amazing. This is a very impressive business and hope they open a location in College Station.

We then traveled to Troup, TX to tour Color Spot Nurseries. Mr. David explained that the company operates 8 other locations across the United States. These locations help supply plants to large retail stores such as Wal-Mart or Lowes. Color Spot mixes its own potting soil and uses products similar to Scott's. I was impressed with the automated planting lines. These allow 330000 units or potential potted plants to be started each week. These seedings go through several growth stages before being placed in custom packaging for each retailer. David explained that Color Spot will have 300 hundred different combinations of plants and packages this year.

Ricky Thompson (Nacogdoches Extension Agent) welcomed us to the SFA Poultry Research Center. The first speaker was a local producer, David Alders. I enjoyed Mr. Alders' history of the US poultry industry. As the poultry industry vertically integrated the consumer started purchasing further processed products. For example, in the 1960s people bought whole birds and processed at home. The 1980s ushered a change to chicken parts packaged and sold separately. In addition, chicken surpassed pork and beef as the most consumed protein during this time. Mr. Alders was also transparent about the antibiotic free birds he produces. This is a decision based solely on customer demand as producing these type of birds is harder and less efficient. Dr. Joey Bray (Director of Poultry Science) gave us a summary of the degrees offered and ongoing research. I was impressed with the large-scale chicken houses located at this facility. These were built through funds provided by Pilgrim's chicken. Providing a great opportunity for students to learn and conduct research.

We were then treated to a tour of the Pilgrim's chicken processing facility in Nacogdoches. This is the company's larges live bird plant and employees 1500 people. These individuals kill over two million birds each week at a rate of 350 birds per min. These staggering numbers seemed unattainable until we were allowed to view the processing floor. The view from the catwalk showed several lines running very efficiently. Freshly cleaned birds were constantly being conveyed in and processed. My only regret is we did not get to see the killing floor.

Texas Farm Products was our last tour of the day. This feed mill was started in 1930 and currently the third and fourth generation run the operation. TFP produces a wide range of products ranging from livestock to pet feed. Alligator and worm feed are a couple of the specialty items I was surprised to learn are produced here. Mr. Bud Wright, CEO, greeted us in their quality control lab. This lab is very important to the success of the company. Each load of raw material is checked for different levels of toxins and nutrition value. Mr. Wright also spoke to us about the longevity of his family's business. I agree with his theory that quality products and good service are the key. His customers know what the feed quality will be and TFP delivers even if its profits are reduced.

Wednesday evening concluded with a presentation by Wes Moorehead the department Head of the TAMU Forest Service. Mr. Moorehead provided us an interesting history of the Pinny Woods logging industry. I was very surprised to learn that almost all the trees seen today have been replanted in the past 100 years. The clear-cut method of logging in the early 1900's removed most of the Pinny Woods. He also spoke about the replant process and how the seedlings are grown.

January 25

I was excited to get started on Thursday morning. We were to visit a logging site north of Nacogdoches. Trevor Terry, Manager – Hancock Forest Management, met us to explain how the logging industry works and what is company does. Hancock is the largest timber management company in the world operating in North and South America, Australia and others. Companies and individuals that invest in timber hire Mr. Terry to grow and harvest the trees for a profit. The equipment was very interesting as well. These operators try for five acres per day with 85-90 tons per acre.

Our next stop was the Norbord OSB Mill in Nacogdoches. Phil Ferguson and Billy Cooper met us for a safety briefing before we toured the plant. This operation is massive. They try to receive 100 loads each day and keep five weeks supply on the yard. Pine makes up 99% of the raw material. The byproducts, mainly bark, is used to fire the dryers and sold as an energy source. Safety was very important to the employees of Norbord. The day we visited the company was treating everyone with lunch for operating several months without an accident.

The last tour of the day was located in Bullard several miles from Nacogdoches. ArborGen is a company based out of South Carolina that provides seedlings for timber production as well as landscaping. They provide three options open pollinated, control pollinated and varietals. These seedlings have differing performances with the varietals offering the best. These are genetic copies of a specific tree possessing superior traits. I found this process very interesting as the development of cotton varieties is very similar. The field operations were impressive. Luckily, we were able to watch a crew harvesting the trees. This machine dug the trees and conveyed them to transport trailers. The trees were then unloaded and boxed for shipment.

January 25

Dr. Beverly Chiodo spoke to us Friday morning on Character-Driven Success. Dr. Chiodo taught for many years at Texas State in San Marcos. I learned a lot from her presentation and enjoyed all the stories of her teaching experiences. These experiences proved the theories she was explaining. I plan to use these ideas in my professional and personal relationships.

The East Texas session was very informative and enjoyable. Everyone we met was extremely nice and welcoming.

Session 7 – Tyler/East Texas January 22-26, 2018 Production, Producers, Progress

Monday January 22, 2018

We were welcomed to the **Texas Freshwater Fisheries Center** on Monday afternoon to begin our East Texas experience. The thing that stood out to me the most was their dedication to preserving and advocating for the public to get out and enjoy our Texas lakes as outdoor recreation. The center is equipped to reproduce primarily largemouth bass, which is the target species for the area. To support their efforts, the center welcomes 50-60,000 guests each year to tour and fish in their provided ponds which they stock for year-round fishing opportunities. We also learned about the prestigious ShareLunker program offered to our state's anglers. This is a program that recognizes anglers that land a largemouth bass weighing at least 13 pounds. The fish can then be donated alive to the fishery center where they will care for the fish on display in one of their aquariums. It serves as a way to respect the species and celebrate the sport of bass fishing.

Dr. Aaron Sumrall, Newton County Extension agent, informed our group on the issue of feral swine in the State. After a brief history of the origin of wild pigs, he gave us an overview of the current challenge facing landowners in the state. According to Sumrall, economic damage is estimated at \$2 Billion nationally, with Texas absorbing \$500-750 million in losses. Ag in Texas has taken over \$50 million of that damage. This seems like a tough number to calculate, nevertheless, we can all agree the swine issue is a problem especially in our improved pastures and row crops.

After checking into our hotel in Tyler, we traveled to **Rozell Sprayer** for a special dinner hosted by Mr. Darren Rozell, a TALL XII Alumnus. After dinner, **Mr. Pete Bonds** addressed us on opportunities in the beef industry, primarily linked to international trade opportunities with countries like China. Pete's optimism about the future of the beef industry was well received by our group's beef producers.

Tuesday January 23, 2018

We boarded our bus for the day at 7 a.m. bound for **Scott's Miracle Grow**. A company that originally began in Ohio in 1868, their commitment to home gardening products and employee care, has built them into a nationally renowned company. The Tyler plant, which was an abandoned Goodyear tire plant before they procured it, employees 30-40 employees. I quickly noticed their commitment to systems organization and commitment to employee safety. The factory seemed very efficient, clean, and orderly. The interesting thing to me was the fact that when the rest of the economy seemed to suffer during the past recession, their business thrives. It's assumed that when households have less expendable income to travel, consumers stay at home and work on their flower beds and gardens. After completing our tour, we were given some small bags of potting soil on our departure.

Our next stop was at the headquarters of **Cavender's Boot City**, a chain western wear store that began in Tyler and continues to grow. We were graciously provided new cowboy hats courtesy of HatCo. Growing up shopping at this store for 90% of my clothing,

it was interesting to revisit and meet the leaders within their organization that has driven their long-term success.

Next, we met back up at Rozell Sprayers as our meeting place for presentation on the Cotton situation in China from East Texas producer, **Pat Pilgrim**. Son of poultry empire creator, Bo Pilgrim, Pat took the family's interests into the row crop sector, pioneering the farming of cotton in the fertile soils of Northeast Texas. The Pilgrim family's international relationships gained through the poultry industry helped propel their cotton exports into similar channels. Today, he farms 56,000 acres and owns a cotton gin. His experience in the ag commodity business over the year has given him valuable insight into the world economy. He ended by reminding us to think of our customer on the global scale and try to discern their needs.

A visit to the Rose Capitol wouldn't be complete without a visit to a rose nursery. Lone Star Rose Nursery welcomed us for a lunch sponsored by "Build East Texas". Mr. Ed Borger gave us an overview of the industry along with a history and highlighted various varieties of roses available and their intended value. At this facility, they start roses in pots then once they reach the desired size, they are packaged for shipment to retail stores in a January to March timeframe.

Our next stop was to the newly renovated **John Soules Foods**. The modern, welcoming headquarters was very appealing and clearly had consumer perception in mind with regards to the atmosphere. The specialty of JSF is in marinated, precooked fajita meat. After a tour of the factory and explanation of processes, we sat down for a

sampling of their product in a board room. My personal assessment of the flavor and texture of the fajita meat left much to be desired. I typically cook my own meat, but I guess if I was a college student needing to eat on a budget and in a hurry, it would make for a sufficient meal. I was, however impressed with their commitment to transparency and food safety. It made me think about the unfounded opinions consumers tout about processed foods not being safe. I saw nothing that caused concern, other than the taste of well done, previously frozen beef cooked in a microwave.

After freshening up back at our hotel, we traveled to **Hollytree Country Club** for a delightful dinner with local supporters of the TALL program. The "**Build East Texas**" organization, a local group committed to agricultural business development, did a fantastic job hosting the evening. We heard from several key local leaders and were able to recognize our own **Kyle Watts** for his efforts in local leadership with a scholarship awarded him by community leaders. **Dr. Charles Long** was also recognized for his many years of beneficial research at the Overton TAMU Research Center. I was especially fortunate to have a couple of guests join me for the evening. My parents, who live outside of Tyler, and my good friend, Stephen Schwartz, was able to join with his wife. Stephen is now looking into getting involved the BET group to help serve their cause.

Wednesday, January 24, 2018

An early morning checkout put us on the road to **Brookshire's Grocery Stores' Warehouse and Distribution Center**. A frigid tour of their warehouse provided an interesting overview of what it takes to manage the complexities of daily distributing

produce to each of its 176 stores located in Texas, Louisiana, and Arkansas. A couple of interesting takeaways: 1) The move to LED lighting in the warehouse had a significant savings on their energy efficiency. Not only due to lighting cost savings, but also the heat reduction resulting away from previously used halogen lighting saved energy demand by the cooling compressors. 2) The process of ripening bananas, that initially arrive green, helps meet the supply/demand challenges of such a perishable product. They can decide how much and how fast they need to move the product and absorb time with manipulating the quantities that get ripened.

After the warehouse tour, we returned to the **Brookshire's Fresh Store** for a tour. This is a high-end grocery store with beautiful produce and unique offerings that target the upper-middle class consumer segment. It happens to be the preferred store by my parents that work in the Tyler area. I appreciated the inside look at their processes.

As we migrated deeper into the East Texas Pineywoods, we stopped off for a tour of **Color Spot Nurseries** in Troup. This is a wholesale plant provider of landscaping plants to Walmart and Home Depot across Texas, Oklahoma, Louisiana, and Arkansas to which they handle all of their own shipping and logistics in order to maintain care of the delicate plants to each customer. Employing 285-500 workers based on seasonal demand, the sprawling 90 acres of greenhouse space takes care of seed planting and starting numerous varieties of plants.

For lunch, we headed on south to the **SFA State University Poultry Research Center**. We had a delicious local flavor in catfish and fried chicken, cooked by the

talented Ms. Linda. My past 4H leader and extension agent, Mr. Ricky Thompson welcomed us and provided leadership for this portion of the week. At this stop, we learned about the poultry industry and its evolution over the years to the vertically integrated system it is today. It has certainly focused on efficiency to become an affordable protein to the world consumer. We also heard from SFA ag professor, Dr. Joey Bray, about the focus and initiatives of the SFA Ag department that educates 385 students in its program. Though poultry is a large component, forestry tends to be the larger draw for students to the college.

We then traveled to the Tyson Foods-owned **Pilgrims Pride Processing** facility where they employ 1500 people. We saw first hand one of the aspects that lends to poultry efficiency. After the birds spend less than 50 days growing from chick to finished broiler, they arrive at this facility and in 35 minutes, they go from feathers to packaged product destined for retailers.

A highlight of the week for me was the tour of a pet food manufacturing plant in Nacogdoches. **Texas Farm Products** was a family-owned company established in the 1930s to make livestock feed. Today, the bulk of their business is manufacturing private label pet foods for customers such as Tractor Supply and Lone Star Feeds. I was amazed at the necessity of Quality Assurance protocols regulated in the pet food industry. They place high importance on food safety, texture, and color to meet consumer demands.

To finalize the day, we traveled to our lodging for the remainder of the week in Bugscuffle, TX, courtesy of the **Texas Forestry Association**. After dinner, we heard from **Rob Hughes, Executive Director of the Texas Forestry Association** about their history and programs. Mr. Hughes stayed with us and lead us for the remainder of our week in the forestry industry.

Thursday, January 25, 2018

After breakfast we departed for a forest harvesting look with **Hancock Forest Management. Mr. Trevor Terry** provided a brief industry overview and an explanation of how their company works with contractors, land owners, and investors. Deemed a Timber Investment Management Organization (TIMO), Hancock is the largest in the world. They basically manage timber land for landowners and provide a target of 10% ROI to investors in the industry. Operationally-speaking, the foresters can harvest about 5 acres per day and haul around 100-120 loads of timber at 28 tons per load. Typically, trees are planted and efficiently grow for 25 years with a thinning process halfway through the phase. Seeing the timber plots, you could see the clean understories and uniform rows of trees typical of a commercial focused industry.

The next stop for the day was **Norbord**, a sawmill that takes pulpwood and turns it into OSB (like plywood) for floor paneling and siding. Walking through the facility was amazing to see the ingenuity of man to come up with such automation. It was very impressive.

After lunch at Norbord, we traveled to **ArborGen Nursery** near Lake Palestine. Here, we got a chance to see the phase of the timber industry that creates seedling pine trees. They have fields that are seeded in rows for various varieties of pine trees. The trees are grown from March/April to Jan/Feb when they are harvested, packaged, and sent to timber plots to establish forestry stands. The mind-blowing thing I learned was how they are speeding up genetic progress of trees though intensive insemination of female trees by hand from various strains of male trees. In nature, pine trees cross pollinate when male and female trees grow in proximity to each other. Given the fact it takes many years to establish a tree to reproductive status, we can quickly produce different seed types by bagging the female pinecones by hand using bucket trucks and inserting pollen of male species to create new seeds. A global company, ArborGen has 800 active field trials in motion to research various tree varieties.

Upon returning to the lodge in Bugscuffle, we had dinner and a presentation from the **SFASU Forestry Department**. We also went over our research projects on the China topic. Dr. Jim gave us some details on preparing for our international trip which we are all eagerly anticipating.

Friday, January 26, 2018

Our final exercise of the week was with the inspiring **Dr. Beverly Chiodo**. Her presentation to us challenged the way we care for our relationships. I came away encouraged and driven to focus on the weight of my words in the way they can build up those in my family and my work environment. She highlighted the importance of letters

in building others up. I found many useful tools to use in the future to speak life into the people that are important to me.

In summary, our week in the pineywoods region of the state was a great experience. I spent my youth in that area and I learned things on this trip that brought me a newfound appreciation for the agricultural livelihood of the area. It's a surreal feeling to realize this TALL experience is nearly coming to a close. With one trip left, its sad to think this group of people that were basically strangers two years ago and now have become such a tight family will gather for one more life-building experience together. I look forward to the China session with eagerness. I am thrilled to have been on this journey with all the valuable experiences.