SCRIBE NOTES
OALP Class 15, Seminar 9
August 24-26, 2011
Theme: "Northwest Oklahoma Agriculture and Industry"

Wednesday August 24, 2011
Brian Arnall

First destination of the Oklahoma Panhandle tour was the High Plains Technology Center (HPTC) where the group was welcomed by Dwight Hughes of HPTC, Mike Ruby of OGE, and Jerry Gadberry of HPTC Marketing. At the High Plains center students receive training on Auto and Diesel Mechanics, Energy, and Safety among many other specialties. The HPTC houses a one-of-a-kind training center where students and industry employees are being training in the high tech classroom where each student is equipped with a laptop, then moved into the shop for basic circuitry and hydraulics, and then advanced to advanced systems. The center also houses an indoor climbing safety and rescue training wall and a working one-half-scale windmill that supplies power to the Tech Center. The most impressive aspect of the center was the specially designed indoor windmill simulator. The similar is capable of replicating anything and everything that can and would occur in a real windmill. The Wind Energy program is a 20-week program that trains students on all aspects of wind energy from maintenance and repair to rescue. Their students are so well equipped that the last (also the first) class had 100% placement. The course had 160 applicants with only 20 open spots. Bronson Ellis, the trainer, also flies across the country and world performing training for others. Ellis was able to build the program himself from scratch. He used his own experience and knowledge of industry needs to develop the course and design all of the training equipment used.

The group drove to the OU Spirit Wind Farm just outside of Woodward. At the farm, Zac Gladhill described the history of Wind Energy in the high plains, how the OU Spirit Farm was built and of course how it got its name "OU Spirit". OU, in efforts of being greener, buys all of the energy credits created by this source of green energy. The OU farm is comprised of forty-four 101 mega-watt turbines. The first wind farm in the region, the Centennial Farm, covers 6000 acres and their turbines have blade diameters of 77 meters. The new farm that is under construction near Piedmont will only take up 3700 acres because of the larger, more efficient, turbines. The new turbines will have a blade diameter of 101 meters.

After the conclusion of the wind farm tour we attended lunch sponsored by the Farm Credit of Western Oklahoma. With a stomach full of BBQ, we headed toward Guymon.

Once in Guymon and checked in at the hotel, we boarded a bus driven by Monty Wolgamott and our guide to the Panhandle, Raylon Earls. The bus took us to the diverse Hitch Enterprises where we saw pork production, grain production, pork and beef feed mills, a distribution center, and a beef feedlot. Mike Brandherm (VP Hitch Pork) described how in 1995 the family started the gilt operation. The group began with a clean slate and even more importantly contiguous land. Now it is a 15,000 sow, farrow-to-finish operation, which is100% owned by Hitch. The piglets are weaned at three weeks (approx. 15 pounds) and moved to the nursery site where they are raised until about 50-60 pounds. Then the hogs are sent to the finishing farms were they are brought to 260-280 pounds. Hitch sends out 6,000 finished hogs per week. All rations are made at the Pork Feed Mill which is within three miles of all barns. Barns are tunnel-cooled which keeps the hogs 20-25 degrees cooler than the exterior temps. From birth to finish it takes six months. It was interesting to find that zero percent of the corn fed to the hogs is grown on site. The pork operation stays 100% separate from the grain operation.

This was our next topic that Steve Hanes (Hitch Farm Manager) described. Steve first began explaining the corn choppers that are used to harvest the green corn used for silage for the feed lot. The chopper runs through 10 rows of the 200 bushel per acre Channel corn that is grown on the farm. In a normal year, each pivot will receive 10 applications of 1.5 inches of irrigation. This year, of course, was not a normal year and most of the fields were on a

limited irrigation schedule of six to eight applications. The corn seed used runs from $200 to $320 per bag which will be used to plant 2-2.5 acres. Because of the price of seed, the limitation of water, and summer heat, the farm is experimenting with different maturity groups and planting dates to see if they could produce the same high amounts of yield in a shorter period of time or grow crops during cooler periods of the year and avoid the heat of summer.

As was mentioned earlier, the silage and corn goes to the Hitch Feedlot which Hunter Herrin (new Yard Manager and cousin of Jason Hitch) gave us a tour through. Hunter told the group that all cattle will go to National Beef in Liberal, Kansas after being on the lot which has a conversion rate of 5.2 to 6.8 pounds. When Hunter was asked about the heat, he said that the weather was causing no adverse affect on gain and its impact may have slightly improved during the recent heat wave. In the hot dry weather of the Panhandle, cattle are under very little stress due to the lack of disease and stress. Hunter mentioned that most of the cattle in the lot have already been conditioned for the heat so it was not an issue. All the feed goes through a feed mill that is located on the feed lot. The mill uses corn from the farm and brought in from corn country along with dried distillers grains from the ethanol plant. Hunter's ideal animal is a Limousine-crossed with Braham and Angus. And of course, he mentioned black is beautiful. The feed mill puts out seven different rations that are fed to the pens.

After the Hitch Enterprise tour, we headed towards Guymon for dinner. On the way we learned more about our driver Monty who said he had taught most of the people we will meet. Monty taught or was in the education system for over 38 years.

Back in town we went to the Wild Horse Art Gallery for dinner and a presentation. At the gallery, artwork from local students and residents was displayed for show and for sale. After dinner, the author of "The Oklahoma Panhandle," Sara Rictor, who is also the Dean of Liberal Arts of Oklahoma Panhandle State University, gave a presentation. Sara's presentation detailed interesting tidbits of the area - from the dinosaur tracks and the Black Mesa, to the Comanche tribe and Santa Fe Trail. She told us about the history of No Man's Land. The area has the tallest point in Oklahoma and was the only location in the lower 48 states that was bombed in World War II. Sara described the contradictions of the Panhandle like the National Forest and Coast Guard Station. In conclusion, Sara told us how Oklahoma Panhandle State University was initiated and how it is the only school in Oklahoma that offers both an Associates and Bachelors Degree.

Thursday August 25, 2011 a.m.
Bryan Vincent

No scribe notes submitted.

Thursday August 25, 2011 p.m.
Danielle Whaley

National Beef – Liberal, Kansas — Terry Gilbert was our host for the tour of the packing plant. Upon entering the facility, we all had to produce photo IDs. We then were given a few facts about the plant itself. The company has existed since 1969 and under the current management since 1992. They produce about 390 carcasses per hour and 6,000 per day. They employ approximately 3,000 people and are ranked fourth in beef production. Close to $5.8 billion in revenue is generated every year. They are a major exporter to Japan and China, with 11% being exported directly and 35% as value-added products. The tongue has the greatest value and is exported solely to Japan. There are seven main areas of production: Food Safety, Grading, Sales Cooler, Ground Beef, Fabrication, Slaughter, and Boxed Storage. We then proceeded to tour the plant in eight different groups.

Our next stop was Arkalon Energy Ethanol Plant – Liberal, Kansas — Dustin Turner was our host at the ethanol plant. He described to us that they have a new product using a by-product of distillers grains in pelleted form and it will be coming out in October. There are three by-products at the plants: distillers grains, carbon dioxide, and

ethanol. The two plants employ about 110 people between the office and the plants. He then took us on a walking-tour of the plant.

From the ethanol plant we traveled back to Guymon and arrived at the Draper Farms Headquarters. I think the word WOW would be the best way to describe what we saw at Mr. Jimmy Draper's farm. It was the biggest collection of just about everything there is on earth! After a delicious meal, we listened to Mr. Ross Wilson from the Texas Cattle Feeders Association speak on animal welfare. He had an excellent presentation that opened our eyes even more on the aspects of the cattle industry by the way of media. He also highlighted several areas that they will be increasing awareness in the next year.

Friday August 26, 2011
Kurtis Sears

Oklahoma Panhandle Research and Extension Center

Friday morning we left Guymon and headed west to Goodwell with Rick Kochenower, OSU Area Extension agronomist, as our tour guide. Our first stop was the Oklahoma Panhandle Research and Extension Center. In 1994, OSU and OPSU signed a memorandum of agreement on the research station and run the station jointly. There is about 500 total acres on the station in which approximately 240 acres is used for dryland crops. The main crops grown on the research station are corn, wheat, sorghum, soybeans, canola, and sunflowers.

There are three weather stations on site. Some of the irrigated farmland uses gray water in their research and those crops are for non-human consumption only. Approximately 450 gallons per minute are needed from the water wells for irrigation. The station uses both the lateral move system and pivot systems. The lateral move system covers the entire field, however when it does rain it is harder for the sprinklers to move due to the mud. Drip irrigation pivots were also installed on the research station with earmark money from the federal government.

The research station also has no-till plots that have been in operation since 1998. Optimal harvest on the research station is about 65% moisture for silage and 26-30% moisture for feed. Irrigated soybean plots average about 80 bushels per acre and are double-cropped with sunflowers.

Dr. Brett Carver is currently researching about 2500-3500 plots on the research station. The majority of those (2000-2500) are drought tolerance plots. We also toured nitrogen plots in which they were studying the timing of application and different application rates of nitrogen.

Kochia weeds have been a large problem for western Oklahoma due to their Round-Up resistance. It is a warm season annual that is harder to control farther into the summer. It is best to spray the Kochia weed with paraquat early in the summer.

Bermudagrass test plots were also viewed at the research station.

We drove by the Extension Office, England Activity Center, Equine Science Center, and the Dr. Jerry Martins Bull Test Station which is the oldest in the state. The bull test is conducting studies on the use of dry distillers grain and how it shortens the shelf-life of beef. They are extending the shelf-life by feeding a high dose of vitamin E.

After our stop at the research station, we drove through the OPSU campus. Rick indicated the school is known for its high quality meats program and rodeo team.

While driving through Cimarron County, we discussed some of the issues agriculture is facing. Water issues are a top priority and concern. Oklahoma City owns right to the water from the Beaver River. The average producer in

Cimarron County farms 12,000-13,000 acres. The county is 60 miles wide by 35 miles tall. About 33-35% of the land in Cimarron County is in the federal CRP program. The county sits on top of the Ogallala Aquifer. The aquifer has high and low spots beneath the surface and therefore makes it difficult to find water. The panhandle does have the benefit of getting cooler at night than the main part of the state; this has been known to increase crop yields.

Dry Land Farming and Rotations in the Oklahoma Panhandle Region (JB and Jarrod Stewart)

We visited the operation of JB and Jarrod Stewart. The Stewarts our fifth generation farmers and homesteaded their place in 1917. They farm approximately 24,000 acres of which most is tillable dryland farm ground. A total of 3,000 acres is still in CRP ground and will be coming out in the next few years. The Stewarts also purchased an elevator in 2002 and have a crop insurance business in which they have about 1,000 policies.

To assist their customers, they have a GPS-enabled jeep equipped with a soil test machine. The hydraulic ram mounts in the passenger seat and allows the driver to obtain soil tests without leaving the vehicle. They tested about 200 samples from the jeep and sent the soil to Ag Vice for testing. They do not charge a fee for this service for their insurance customers. They chose to use Ag Vice for their testing since they do not sell fertilizer. They are solely in the testing business and therefore do not have a conflict of interest, in Jarrod's opinion.

Their main machine shop in which they provide maintenance to their own equipment and sell chemicals is a 130 X 80 feet building with a 50-foot door to handle larger pieces of equipment. They sell chemicals under the name Hopkins Ag Supply which they started in 2003. For every $1 of chemical they buy for their own operation, they sell $10 worth of chemical. Glyphosate is their biggest seller.

The elevator that was purchased in 2002 holds up to 650,000 bushels. In 2010, they sold over 600,000 bushels of wheat out of the elevator.

Next, we toured some of the equipment used by the Stewarts. They recently purchased a Case 4420 120-foot boom sprayer that is GPS controlled with auto boom control for the boom sprayer that eliminates double spraying. The sprayer cost $258,000 and can spray up to 200 acres per hour. In 2010, they sprayed 88,000 acres - they normally spray between 55,000-60,000 acres. In 2011, chemical sales, spraying, and fuel has been about a one-third of normal due to the drought conditions. We also viewed 32-foot Shelbourne Stripper heads that cost $50,000 and are manufactured in England. The stripper heads are used for wheat harvest and increase efficiency with the GPS units allowing for no overlap going through the fields.

The Stewarts have left 120-foot strips in the fields from former CRP ground for wildlife habitat. They try to coordinate field size in increments that will fit the size of their equipment without overlap. The main challenge has been the lack of rain. In the last 251 days, they have received less than 0.2 inches of rain.

No Man's Land Beef Jerky (Owners: Britt Smith and Belinda Gardner)

We did not tour No Man's Land Beef Jerky. We were given a talk about the jerky at the Stewarts farm.

No Man's Land Beef Jerky was started in 1994 as a side business with their deli. They would deliver the beef jerky in their area to bars and convenience stores. They were caught "bootlegging" beef jerky and when they went to pick it back up the owners would not let them take it back. They now have a large custom made dehydrator and produce approximately 500 pounds of beef jerky per day. It takes about 1500 pounds of meat to make the 500 pounds. They are currently at maximum production at their facility in Boise City and are in the process of getting a plant built in Amarillo, Texas. Sales are up 22% after they revamped their website. They currently have 4,600 stores on their waiting list to carry their product.

Pectoral meat is used to make the jerky due to its leanness and length. The product comes from the Excel Beef Packing Plant in Dodge City, Kansas. They have recently started selling a beef stick as well. The sticks are produced in Missouri and shipped to western Oklahoma prepackaged. The cost is $0.14 to buy the sticks and they have approximately $0.37 per stick total cost. Future enhancements include a weigh and bag machine in their Boise City operation. The cost of the machine is $300,000. They currently have 20 employees in Boise City and project to have 65 employees when their facility in Amarillo is completed.

JR McCall Property, CRI Feeders and Hough Elevator

We stopped on the side of the road to discuss the McCall property in which they had several pivot systems, but due to the drought they ran out of water and were unable to produce a crop this year. CRI Feeders is a large feed yard that is owned by the Footes and Boseidons. The Hough elevator is a large elevator owned by ADM.

Challenges of Growing Communities (Speaker: Jess Nelson)

Mr. Nelson discussed the reason the Panhandle was called no man's land. From 1850 to 1890, it was considered unclaimed territory. In 1890, it was attached to the Oklahoma territory and was part of statehood in 1907. The two challenges faced by Guymon when the Seaboard facility was coming in was the money in which to get the entire necessary infrastructure built for the town and housing for the number of workers that were going to be employed there. They passed a 1% sales tax to help with these issues and develop the town to handle the large influx of people. The town grew from a population of about 7,800 before the plant was built to just over 13,000 now.

Synthesis

Many positives were brought up during our synthesis on the way back to Guymon: the tour of the Vo-Tech center, the beef and swine processing facilities, passion for the people that live in western Oklahoma, Hitch Enterprises, and Draper's Show Place. It was evident and stated by numerous OALP members, that the people in the panhandle have a passion for the land and embrace the culture of western Oklahoma. They truly are modern pioneers of the West.

Some of the drawbacks: we were not able to go to Boise City to see the No Man's Land Beef Jerky plant and that area, the hotel accommodations which were a little on the poor side, and it would have been nice to have a 10 minute break after we had toured the beef and swine facilities before we went out to Draper's Farm for the reception with the alumni.