Mark Kubecka #10 TALL XII - Session 5 Narratives July 26 – 29, 2011

TALL XII Session 3 in Houston was a chance to showcase to the class my home region of the state. Even with it being my home range, there were still new things to see, new people to meet, and new ideas to share. The session planners even managed to arrange for this mysterious wet stuff to fall from the sky since most of us had not seen it in many months!

Day 1 – July 26

# Welcome & Scott's Miracle-Gro Business Overview – Jim Tates:

The Scotts Company was formed in Marysville, OH in 1868, and merged with the Miracle-Gro family in 1995. The SMG company currently employees over 8,000 people that work on five continents. SMG did \$3.14B in sales in 2010 and had the number 1 market share in the US, Canada, France, and Germany markets. Their vision is to be the global authority on lawn and garden, and use the mission statement "local insights with global authority" to continue to grow and retain their leadership position.

# SMG Marketing Approach - Mike Suetterer:

Mr. Suetterer discussed the SMG business approach as "consumer first", and that SMG is very cognoscente of how fast negative information can spread in today's social media. Customer service that is available at home, in stores, and in research are all areas that SMG concentrates on to provide top notch products and service. For the customer at home SMG offers a telephone "help line", e-mail reminder services, and social media sites like Facebook, Twitter, and You Tube. To provide in-store service SMG has a training institute to educate retail associates on products and their applications. Additionally it staffs over 3,000 SMG associates at retail locations during the peak lawn and garden season. Finally, SMG commits large resources to contacting over 50,000 consumers annually to determine how to better serve them whether that is through new products, better training, or improved methods.

#### Innovations Driving Our Future - Jeff Garascia:

The base business for SMG started in 1907 as a mail order grass seed operation. It started in the chemical application business in 1937, the fertilizer business in 1956, and the growing media sector in 1998. SMG is continually bringing new products to the industry and these new innovation make up about 15% of the US sales. The approaches used to bring new innovations to the market are to make them: simple, sustainable, and significant. This approach has lead to a couple recent innovations that have been a big hit: the edge guard spreaders, ready to use fertilizers and chemicals instead of concentrates, expandable soil, bed bug controls, aerosol Round-up, and moisture control plant food. These products are better for the customers and the environment at the same time.

# Government Affairs - Stephanie Pizzoferrato:

Mrs. Pizzoferrato discussed how much of a burden government regulations can be in any industry and especially one like SMG that has so many products and is always creating new ones. SMG has to register every product that they produce, all the way down to bags bird seed. Amazing to believe that something so simple and natural as bird seed must get government registration was a shocking revelation to most of us.

# Sustainability - Mike Shelton:

Mr. Shelton discussed the proactive approach SMG has taken to meet and exceed the sustainability requirements of their retailers. SMG has set some goals to stay ahead of this growing movement amongst many major retailers. Some of SMG's goals are to reach 50% of plastic in materials to be recycled, a 50% reduction in overall packaging by 2018, and a GRO 1,000 gardening program to be in place also by 2018.

# Urban Community Agriculture Industries Social

The TALL class was welcomed to Minute Maid Park by Mr. Charlie Hall and Mrs. Linda Willis. They were followed by Harris County Judge, the Honorable Ed Emmet. who talked about the size and economic impact that Harris County has on the region and state. He also discussed the opportunities that exist for agriculture even within a county with a population as large as Harris County.

Judge Emmet was followed by Amy Graham of the Texas Nursery & Landscape Associations, Ken Gorzycki the director of agronomy at the Horseshoe Bay Resort, and Eric Malass of the Texas Pest Control Association. Each person spoke on the current status of their industry sector and what changes and opportunities lay on the horizon.

# <u>Issues Facing the Urban Community Agriculture Industry in Texas – Honorable Todd Staples:</u>

Commissioner Staples gave a speech about the growth of community agriculture in the ever expanding urban areas. He applauded the entrepreneurial sprit and creativity of those in agricultural who are taking advantage of the new opportunities that are being presented to service those people wanting locally grown products.

#### Tour of Houston Astros Playing Field

The closing activity of the evening was a tour of the playing field at Minute Maid Park. All of the guys in the group were like kids in a candy store posing for pictures sitting in the dugouts, in the batters box at home plate and warming up in the bullpen!

# Tour & Breakfast of Glueck's Nursery – Charles & Mickey Glueck:

Our early morning drive thru Houston traffic out to the westside of town was well worth it when we arrived at the Glueck household and were greeted with homemade pig-in-a-blankets and koloaches. The Gluecks were wonderful host and told about the evolution through agriculture that the family has taken to now operate a nursery. The Glueck farm operated as a traditional corn, milo, and cotton farm for 40 years prior to the diversification of the nursery business. The first plants in the nursery were a few perennials that demanded too much time while the traditional farm was still being operated. In 1997 the nursery was converted to trees because they were more forgiving of the timing issues while the rest of the farm was still in operation. The tree sector has since continued to grow and the traditional farming has been phased out.

Currently the nursery houses about 70% live oaks, 15% other oak species and the last 15% are other tree species of the local landscape industry. The trees generally take 3 to 4 years to reach the first marketable size, and many carried a few additional years to increase value. Most of the Gluecks trees go into the major Texas population hubs of Houston, San Antonio, and Austin through wholesale suppliers. The current economic situation has certainly slowed the demand for trees and the operation is currently only running about 70% of capacity.

# <u>Tour RiceTec Inc. Cleaning & Processing Facility – Chris Glueck.</u>

RiceTec is a hybrid seed rice company that started in the late 1980's as Farms of Texas and took on the current name in 1990. The Eagle Lake cleaning and processing facility is a state of the art facility recently built to handle over 14,000 acres of hybrid seed rice produced here annually. The hybrid rice requires the growing of a different male and female rice variety side by side, then the forced cross pollination of the two lines. The pollination is forced by using small helicopters to fly the male line of rice and disperse the pollen into the female line. The female line is the portion that is later harvested as the new hybrid variety. The male line is later harvested and sold into the food rice market. This is a demanding and precise process, but the hybrid varieties that are produced typically increase yields by 10 to 30% over traditional varieties. These increases in production are vital as the precious resource of water becomes more valuable.

#### Rice Production Tour – John Gertson:

The Gertson family farming operations is made up of the three brothers and their father. The farm is involved in crop production, cattle, a custom flying service, hay, and a rice handling and drying facility. The major sector of the farm is rice production, and the farms uses mostly laser leveled fields to produce its crop. The laser leveling in rice has made for more efficient use of water, labor, and land. The Gertson family was a great host at farm and served a great lunch to the class!

# <u>Goodeau Farms hay Tour – Michael Goodeau:</u>

Our TALL classmate Michael toured the class thru his family hay operation. We got to see the fast paced bailing and loading processes taking place while on the tour. We also saw the watering system used to keep the pastures in production even during this major drought. There was lots of investment in design, construction, and planning involved in developing the water system and land leveling to efficiently service the hay blocks. The primary clients of the business are the horse raisers and they require a consistent high quality source of hay. This operation will generally produce between 150,000 and 175,000 bales per year.

# JD Hudgins Ranch Tour – Coleman Locke:

JD Hudgins is a name synonymous with the Brahman cattle breed. The beginnings of the Hudgins family ranch started in 1839 by Joel Hudgins. Joel had four sons, one of which was JD, and he started the JD Hudgins Ranch in 1908. In 1962 the ranch was divided amongst family into 5 divisions that all had their own land and cattle. The JD Hudgins, Inc. business was maintained as the sales branch for all 5 divisions. All divisions bring their sale quality cattle to the ranch headquarters for preparation to sell around 16 to 17 months of age. The cattle are then sorted and grouped to prepare for marketing. JD Hudgins Inc then uses its name and connections within the industry to market the cattle. A percentage of sales and fee for housing animals pays for the operations of the sales branch. While at the headquarters office the class got to see the mount of the famous bull Manso, who is the founding sire for the Hudgins ranch stock.

# Observe Channel Catfish Harvest & Load-out:

The class got to observe the load out process for channel catfish from a local fish farm. When the class arrived the fish had already been seined and were waiting in holding sock for loading. From the sock the fish are loaded in large net baskets and crane lifted onto a truck with specially equipped tanks to keep the fish alive during their transport to the processing facility. Fish must be alive when they reach the processing plant to be processed. Any dead fish must be discarded to ensure only freshest and highest quality products reaches the marketplace.

#### Tour Prasek's Hillje Smokehouse – Dwayne Krenek:

The Hillje Smokehouse is a very beautiful and very busy location. The smokehouse is a family business started by Mike and Betty Jo Prasek in 1974. It originated with the purchase of the Hillje Grocery Store, and then in 1981 moved from downtown Hillje to a new location on the recently expanded State Highway 59. There have been 3 other major expansions since 1981 to reach the current point. In 1997 a new 7,000 square foot retail center was added, then in December 2009 another 15,000 square feet were added to reach the current size of over 70,000 square feet that includes a new Hillje Town hall banquet room upstairs.

At this time Prasek's produces over 35,000 pounds of sausage a week, and has 45 different smoked meats and 45-50 bakery products on its shelves. Prasek's now has its own distributing company that serves 500 to 600 accounts throughout the state that carry Prasek's branded products. An additional arm of Praseks is the wild game processing, and it handles over 6,000 orders for deer and hogs annually, with most orders consisting of more than 1 animal.

# Cattleman's Reception in El Campo

An outstanding steak dinner was a great way to end a busy travel day across the coastal bend. The Graham family was a very generous sponsor and their crew cooked a great steak!

Senator Glen Hegar addressed the crowd and did a great job promoting and describing the vast diversity and potential of the area's agricultural production.

Day 3 – July 28

# Port of Houston Authority

# Welcome/PHA Overview/Mission – Roger Guenther:

The mission of the Port of Houston Authority is to facilitate trade and commerce thru its 8 terminals along the Houston Ship Channel. The ship channel that services PHA is 52 miles long and was opened in 1914. PHA was charted to create job growth and economic development thru the movement of commerce. Currently 150 public and private companies do business at the PHA terminals. These terminals service over 8,000 vessels and 150,000 barge transits annually. The PHA is the #1 US port for foreign tonnage and total imports, and is the 6<sup>th</sup> largest container port.

#### PHA Trade and Initiatives – Ricky Kunz:

The origination division works in the areas of trade, marketing, foreign affairs, and cruise liners. More than 80% of the cargo shipped into PHA is delivered within Texas or within a 1 day drive of the port. The goal of PHA is to serve all areas west of the Mississippi River and east of the Rocky Mountains. There is about 1/3 of the US population in this service area.

One regional program that PHA is working on is the Gulf Coast Advantage Program with Tampa Bay, FL, and Mobile, AL. These groups work jointly to move products and keep containers and ships full and at their most efficient.

A new opportunity on the horizon is the new Panama Canal that allows for larger ships to pass this shortcut gateway between the Atlantic and Pacific Oceans. This new opportunity will require the additional dredging of side channels to at least 45 feet by 2014.

# <u>Channel Development/Dredging – MarkVincent:</u>

Channel development has a major job to maintain the ship channel's integrity. This requires coordinating continual dredging projects and working with underground pipelines that criss-cross the bay floor. These projects all must be completed while not hindering the flow of valuable ship traffic.

The new Panama Canal development is forcing PHA to deepen its channels to at least 45 feet to handle the larger ships, and this project will cost over \$600 million. There will be millions of cubic yards of dredge material to manage as part of this dredging project. On a typical year with only normal channel depth maintenance there will be 10 million cubic yards of dredge material per year to move. To handle all this material the port has 6,000 acres set aside for this purpose.

# PHA Environmental Initiatives – Aston Hinds:

The environmental affairs division deals in 3 primary areas: air, water/permits, and EMS/compliance. All three of these areas are vital to the operations and safety at PHA.

A new program that PHA is attempting with shipping companies is the conversion from bunker C fuel to a cleaner burning fuel once the ship is within 10 nautical miles of shore. This conversion has shown massive reduction in air pollution, and has received the attention of the EPA, which is awarding the PHA a Gulf Guardian Award.

# Security Initiatives at the Port – Mark Smith:

There are 53 officers and 100 gate guards that make up the port police department. The port police handle the issues on land around the port while the coast guard handles issues on the water. Any cargo related issues are handled by customs. These three groups do share resources that benefit each other such as monitoring camera systems.

# <u>Turning Basin Facilities/Operations – Angus Hanes:</u>

With all the products that move through the port terminal, space is always at a premium. The total PHA turning basin storage consists of 2,000,000 square feet of open storage, and 1,200,000 square feet of covered storage. All of this space is at a premium, and the PHA uses a tariff structure for cargo left over 30 days.

The volume through the terminals shows no signs of slowing down. Current growth through PHA stands at 3% for cargo and over 13% annually for containers. Space and efficient movement of products will continue to be a major operational challenge.

# Container Terminal Operations & Tour – Roger Guenther & Ryan Mariacher:

The newest container terminal at PHA is the Bayport terminal which opened in 2007. The other container terminal is Barbours Cut, which opened in 1976. The PHA container terminals handle over 1 million containers per year, and PHA has its own maintenance crews for all container handling equipment. While the ships are unloading containers or cargo there will be fuel barges refueling the ships from the channel side to keep total ship time in the port to a minimum.

The unloading and onsite transit/storage of the containers at Bayport was an awesome operation to see, and a non-stop flurry of activity. The ships that carry this cargo and cranes used to unload the containers are massive pieces of equipment to see up close.

# Cargill Presentation & Tour – Michael Allen and Bart George:

The Houston Cargill facility was built in 1967 and housed a 3 million bushel storage capacity. An additional 1.4 million bushel storage was added in 1972, followed by 1.7 million bushels concrete storage houses, 2 new truck dumps, and a new ship loading belt in 1980. The current storage capacity at the facility is 6.1 million bushels, and 75% of what is handled is wheat. Most wheat (75%) is railed into the facility and then loaded onto ships for export. The rail capacity of the site is 350 cars, which are brought to Cargill by the Port Rail Road Authority from Houston where train companies drop off. The site has two rail receiving pits, and can unload 100 cars in 8 hours.

Trucking into the facility is also a major crop supply source to the site. These trucks can be unloaded at the site at the rapid rate of 12-15 per hour. Additionally, as many trucks are loaded at this site, as unloaded and many loaded trucks are sold to the Commodity Credit Corporation to supply food aid to 3<sup>rd</sup> world countries.

The outdoor tour of Cargill was not possible with strange wet stuff falling from the sky, but we did get to tour the ship loading control room. This room housed an impressive computer system that is used to load the ships while maintaining strict quality guidelines.

# Houston Police Department Ride-Along – Officer Todd Harris:

The last event of Day 3 was the HPD ride-along program. It was a chance to see the work that major city law enforcement preforms, and the interactions with the day to day problems that face our nation. I certainly have additional respect for those who help protect our streets, and how difficult a job that they have to perform.

Day 4 – July 29

# The Outlook for Energy: A View to 2030 – Steve Maples:

Starting in the 1950's the world consumption of energy began to grow exponentially, and that exponential rate has continued to current day. Energy supply started with the use of traditional biomass fuels (wood), then progressed to coal, oil, and gas, and finally into the newer technologies of hydroelectric, nuclear, and renewable sources. The current world

population is 7 billion people and is expect to reach 8 billion by 2030. All these people will continue the accelerated need for energy.

Electrical power generation is and will continue to be the largest consumer of power. On the bright side there is twice as much savings as new growth since 2005 through efficiencies from both the generation and use sides of the equation.

Today 80% of the world's power is supplied by oil, gas, and coal. Biomass, nuclear, hydro, wind, solar, biofuels, as well as others make up the remaining 20%. The reason behind the use of the Big 3 in power generation is that they are the cheapest sources. A concern for power generation in the future is the CO<sub>2</sub> emissions associated with production. These emissions from OCED countries have been flat at 10 billion tons per year for quite a while, but China, India, and other developing countries are producing over 20 billion tons annually and growing. Even adding in a \$30 cost per ton of CO<sub>2</sub> tax the Big 3 sources are still be cheapest alternatives. Nuclear and wind become more evenly priced at a higher tax rate, but at what cost to economic prosperity. There are major challenges ahead to meet energy demands and balance environmental well being for everyone.

Marsha Moss (#14) TALL Class XII – Session #5 Houston/Gulf Coast July 26-29, 2011

#### <u>July 26, 2011 - Tuesday</u>

#### Scott's Miracle-Gro Company, Southwest Region

The class met up at the Southwest Regional office of Scott's Miracle-Gro Company to kickoff the week's agenda in the Houston and Gulf Coast area. The company indeed rolled out the "red carpet" treatment for our class at their offices and the social event. We heard a brief overview about the company from Mr. Jim Tates, which is the President of the Southwest Region. The company has a long history that started in 1868 and is now the global leader in the lawn and garden sector with approximately 8,000 employees. The company founder had a saying that is still used today, "If you find a need, fill it." The need is being filled with operations in five continents with approximately \$3.14 billion in global sales.

The staff of Scott's Miracle-Gro began to highlight the company's different divisions. Mr. Mike Sutterer, Vice President of Marketing, discussed the company's marketing concepts. Social media and networking (such as facebook and twitter) are being utilized to prove the company's focus of consumer first. Another way to achieve this goal, the Scott's Training Institute is used to educate retail associates within a variety of retail outlets and additionally Scott's provide in-store counseling with 3,000 plus associates. Another innovative approach, for which I personally signed up for, is the e-reminder registration at <a href="https://www.scotts.com/">https://www.scotts.com/</a>. The program allowed me to register for the different types of email alerts on products and care tips for my lawn/garden. Surprisingly the consumer helpline serves 38,000 Texans each year.

Mr. Jeff Garascia, Senior Vice President for Global Research and Development, discussed their goals to make a simple, sustainable and a significant product. The R&D department generates the new products that can account for approximately 15% of the US sales. The company fact sheet indicated that more than \$50 million annually is committed to research and development. The EZ Seed® product launch recorded \$100mm in global sales in 2011. Another interesting product that will launch in the future is the Expand'N Gro® soil amendment product. This unique product will grow 3 times in size when water is added, thus creating a smaller product for ease in handling by consumers. Another product created with the consumer in mind is Scotts Snap spreader. No more trying to get the right amounts in the spreader and guessing at what calibration setting. I look forward to trying out both new products.

Ms. Stephanie Pizzoferrato, manager of Governmental Affairs, explains their role in keeping the company with the ability to operate. Governmental Affairs works to balance the business needs, company's priorities, legislative priorities and laws/regulations. Ms. Pizzoferrato indicated that the majority of issues revolve around water quality. Scott's Miracle-Gro works hard to meet with legislators to educate and hopefully at times be the expertise needed when important issues come up. She concluded with a very interesting statement that I had never heard before, but believe in. A company that lobbies enjoys about 20% greater performance.

The next speaker was Mr. Chris Wible, Director of Environmental Stewardship. Mr. Wible explained his job was a tool in the Governmental Affairs toolbox. The goal is to ensure science is the foundation for policy decisions and to get the correct information out to the consumers and regulators. For example, as a proactive approach, Scott's Miracle-Gro entered into a voluntary memorandum of understanding with the Chesapeake Bay Commission to reduce phosphorus levels in its products and be phosphorus free by 2013. The situation such as this has lead to other productive partnerships and relationships with non-governmental organizations (stakeholders). Mr. Wible indicated that urban storm water is a growing issue. The company has started

promoting greenspace collaboration and outreach to let the urban consumers know how to prevent or minimize storm water runoff.

In conclusion, Mr. Mike Shelton, focused in on sustainability of the company and its products. The company wants to focus on operations to understand and improve the environmental footprint (carbon emissions). The goal is to work with suppliers/producers to develop whole farm plans or conservation plans.

The one thing that was evident in hearing each speaker at Scott's Miracle-Gro Company, was that the employees had a passion for their jobs. You could tell that they enjoyed what they were doing and felt a pride in how Scott's Miracle-Gro Company was growing and leading in the lawn and garden sector.

#### "Urban Community Agricultural Industries" Social and Reception at Minute Maid Park

According to the U.S. Census Bureau, the population of Harris County, Texas is around 4 million. How fitting that our reception focused on the agricultural industries in the urban community of Houston. Three industries were highlighted as enhancing the quality of life. Those were landscape, turf and pest control. The program focused on each and how much of an impact they have on the Texas economy. I quickly forget these aspects are directly tied to agriculture and exactly how much of an economical impact each industry has. Upon conclusion of the evening, everyone was given a tour of the field at Minute Maid Park.

#### July 27, 2011 - Wednesday

#### Glueck's Nursery

We arrived to the Glueck's family home to the smell of warm homemade goodies. Mrs. Glueck and her daughters had spent countless hours in preparation of our arrival. Mr. and Mrs. Glueck discussed their operation with us and how they were lead into the family tree farm business after years of farming row crops. The tree farm sells wholesale to landscapers primarily in San Antonio, Austin and Houston area. Mainly the tree farm sells oak trees that are 3 to 4 years old, but grows a vast variety and sizes. The farm has worked hard to create a growing media to optimize the tree growth, install automatic drip systems to minimize water usage and utilize time release fertilizers to lower input costs. In addition to the impressive business, it was evident that there was strong family values present in the household and the business.

# RiceTec, Inc. – Hybrid Seed Rice Cleaning & Processing Facility

The company started in 1988 and is headquartered in Alvin, Texas. RiceTec, Inc. was the first company to commercialize hybrid rice seed in North and South America. The company specializes in technology that focuses attention on the breeding techniques with genetic traits that create the value for the farmers. Almost 10 years ago, there was 280,000 acres of rice production, now there is only 175,000 acres of production in Texas. Mostly the area utilizes the hybrid rice seed grown by RiceTec. The added values to the farmers include the Stand Guarantee Policy to minimize risk, exclusive crop insurance, maximum yield and disease tolerance.

#### Gertson Farms Partnership and Lissie Flying Service

Our next stop was to Gertson Farms and Lissie Flying Service. John Gertson is a TALL alumnus and partner in the farm. Being from the Panhandle and North Texas region, rice farming was new to me. I was very interested in hearing how the fields are flooded and drained for harvesting. I quickly learned there was a fine art to getting the field wet, then pulling the water off again. The farm is utilizing the NRCS EQIP program to laser level fields to the optimum grade of a 2/10 fall across the fields. As a business diversification, Lissie Flying Service was added to the operation in the 1970s. The service operates two-502 Ag-Cats to apply fungicides and chemicals. Upon completion of our tour, the family along with Mr. Kelley provided the class a wonderful lunch.

During lunch, the class had further discussions on the upcoming water issues facing Texas. Water is extremely critical to rice production; therefore, the rice industry and area farmers have done research and studied the water usage and efficiencies. John's brother is very active in the rice industry as well as the local water board. He is working hard in Austin and Washington DC to ensure the industry has water to continue its viability. I learned a great deal about rice production and water issues while at their family farm.

#### JD Hudgins Ranch

Our next stop was to the legendary J.D. Hudgins ranch located in Hungerford, TX. While we are fortunate to have Michael Goudeau as a fellow classmate, Coleman Locke which is President of J.D. Hudgins, Inc. gave us the history of the family business. The ranch is owned and operated by the fifth and sixth generations of the Hudgins family. Amazingly the impressive Brahman operation all started with the purchase of one bull, Manso. The bull was introduced into the family herd in 1933. With a breeding program based on Manso, the operation has grown into 2,000 registered females. It is estimated that over 75% of all cattle registered by the American Brahman Breeders Association carry Manso breeding. J.D. Hudgins Inc. is well known for exceptional genetics and is in breeding programs around the world. Interestingly the ranch only sells semen to foreign buyers.

#### **Goudeau Farms**

Goudeau Farms is owned and operated by Michael Goudeau, which is part of the Tall XII, and his family. The farm consists of approximately 1,000 acres of irrigated and non-irrigated hay production. The family has built a successful business around the horse owners in the Houston area. Annually the farm produces up to 250,000 small square bales. The high-quality hay produced is predominately either Coastal or Alicia hay. The intensive farm operation balances weed control, irrigation scheduling, field cuttings and fertilizer application for optimum growth and performance. I was personally impressed with the family aspect of the business. Michael's mom even helps cut hay and the kids were out helping that day as well.

#### Prasek's Hillje Smokehouse

From reading on the agenda, I was expecting a small meat processing and smokehouse facility. I was very surprised to see the large diversified operation. The smokehouse has a convenience store, restaurant, meat market, bakery, processing facility, smokehouse facilities, convention center and even an in-house chef. This family operation also had another very interesting history. The Prasek family started the business in 1974 by making sausage. Now the smokehouse employs around 120 people that make 35,000 lbs of sausage per week, smokes 45 different beef products and makes between 40-50 specialty bakery items. The business was expanded in 1997 to include a wholesale division which services 500-600 businesses. The catalog business alone processes 6,000 orders per year. This was a unique stop and I plan to stop in again for goodies on my next trip to the area.

# Cattleman's Night Social

The Cattleman's Night social was a nice relaxing evening with a great meal. The relaxed atmosphere enabled the class to meet people from the El Campo area as well as fellow classmate's families. Graham Land and Cattle Co. prepared a perfectly cooked steak dinner with all the fixings. Many other gracious sponsors hosted the event. The keynote speaker was Texas State Senator Glenn Hegar. Mr. Hegar discussed the key issues of the drought and water that were facing Texas.

#### July 28, 2011 - Thursday

#### **Port of Houston Authority**

The Port of Houston Authority (PHA) spent the morning with the TALL class. The class was welcomed by Roger Guenther, Vice President of the Container Terminals. The Port of Houston Authority was authorized by the Texas Legislature in 1927 as an autonomous governmental entity. The port is situated along the 52-mile Houston Ship Channel just a few hours from the Gulf of Mexico. The authority and approximately 150 businesses are located along the channel. The port is #1 in the U.S. in foreign waterborne tonnage, #1 in U.S. in total imports and #2 in the U.S. in export tonnage. I quickly figured how this related to agriculture and the supporting industries.

Ricky Kunz, Vice President of Origination, gave us an overview of his duties to promote the Port of Houston Authority and bring in new businesses and trade through the channel. Mr. Kunz is working hard to bring distribution centers, break bulk items and the "big box" companies into the port. Some challenges that face the port in growth would be the availability of land for expansion opportunities. The discussions on trade development were interesting.

Mark Vincent, Director of Channel Development, discussed his role at the Port of Houston Authority. Mr. Vincent is responsible for maintaining the channel and construction next to the channel. From dredging the channel, dredged material management, marine construction permits and pipeline licenses the development division keeps the channel moving. He indicated that one license may have over 20 pipelines. The safety of the channel is of upmost importance. Another interesting figure was that each foot of project depth lost cost approximately \$373 million per year. The dredged material alone accounts for 10 million cubic yards per year and the management land dedicated to this material accounts for 6,000 acres.

Aston Hinds, Senior Manager of Environmental Affairs, was our next speaker of the morning. Dr. Hinds discussed how the environmental affairs division handles the air permits, water permits, management programs and compliance issues. The Port of Houston Authority is committed to ensuring that the public and private companies along the channel are in compliance with environmental regulations. Like many other tours the TALL class has attended, the environmental aspect is playing a large role in the authority's business plan.

Angus Hanes, Assistant Terminal Manager of the Turning Basin, has been with the PHA for 27 years. He discussed the bulk and break bulk facilities which are located 50 miles from the Gulf of Mexico. The banks are lined with open wharfs and docks with sheds and warehouses that are used for direct loading operations and are situated near three areas for ships to turn around. The turning basin handles 1,800 ships per year. This terminal is also used to load trucks and rail cars that serve the Houston area and all points in the United States.

Again Mr. Guenther talked to the class about the Containers Terminal and gave us a tour of the terminal. This division has seen the most growth at PHA by handling 1 million containers each year. The container terminal consists of 230 acres with plans to double the terminal size in the future. The terminal handles 65% export and 35% imports and generates \$130 million in revenue per year. During the tour, we watched the impressive wharf cranes move cargo containers from the ships to the dock and vice versa. The precision of the cranes was amazing. The management organization of this terminal was also impressive. Each container and truck trailer is tracked with computer systems. The tour seemed to tie it all together.

#### Cargill

As we traveled to Cargill's Grain and Oilseed Supply facility it finally began to RAIN. While the rain hampered our Cargill tour, everyone was excited and had no issue getting rained on. The Cargill facility has 166,000 million bushel capacity and 300,000 million bushels per year in shipping capacity. The main product shipped from this facility is wheat, but other commodities are handled. The rail track facility consists of 350 cars on 21

tracks and accounts for 75% of the facility's commodities received. The largest customer is Cargill-Mexico which receives hard red winter wheat. During our abbreviate tour, we got to see the elaborate computer handling system. All the commodities are handled, monitored, tested, blended and loaded out of the computer operated commander center.

#### **Houston Police Department Ride-Along**

What a once in a lifetime opportunity. I will admit I was a little apprehensive at first, but as the night progressed I enjoyed myself. The police division was very welcoming and Officer Thebeau showed me the beat. While he indicated the night was extremely slow and non-eventful, I had fun and for this country girl saw more than I expected to see. The next morning the exciting stories will always tie our class together.

#### July 29, 2011 - Friday

#### ExxonMobil Production Company - Steve Maples

Mr. Maples gave an impressive presentation on the Energy Outlook for 2030 <a href="http://www.exxonmobil.com/Corporate/energy outlook view.aspx">http://www.exxonmobil.com/Corporate/energy outlook view.aspx</a>. While not surprised, the energy demand is and will continue to grow rapidly. The global demand for energy will be greater than 600 quadrillion BTUs. India along with its rapid population growth will demand an estimated 150 quadrillion BTUs. The outlook indicated that the industry sector will see growth in use of electricity and natural gas. While growth in the wind, solar and biofuels was represented at 9.9%, the energy demand was still greatest in the nuclear and natural gas sectors. This was a very interesting outlook presentation and I personally feel that the energy costs will play a large role in the future growth of agriculture and profitability of the industry.

#### **Conclusion**

As the week closed and as I looked back on the week, I was again impressed by the family owned and operated agriculture business and operations that were started and built from the ground up. It was evident that the drought that Texas is experiencing is vast from the Panhandle to the Gulf Coast. People in all areas of agriculture are feeling the stress. The largest issue that will be facing agriculture is water and water legislation. I myself was impressed with the rice farming operations and the fish farm. The main reason and goal I have in the TALL program is to learn about the diversities of agriculture throughout the state and country. This was a productive trip for me.

# Texas Agricultural Lifetime Leadership Program Class XII Session 5 Houston/Gulf Coast July 26-29, 2011 Summary by Amanda Dyer

Our Houston trip marked the over halfway point of our TALL journey. It was strange to be in and around Houston and not see the normal abundance of green grass or feel the humidity that is expected in July/August. This weighed heavily on everyone's minds from all parts of the state. Before we departed on Friday, we were able to see actual rainfall. All of us left hoping that we could take the rain back to our own parched areas. Needless to say, drought and water was discussed in many of our meetings.

#### **Tuesday, July 26, 2011**

#### **Scotts Miracle-Gro**

I must say that our first visit threw me for a loop as far as location. We were instructed to meet at Scotts Miracle-Gro in the Woodlands. For some reason, I expected a more rural setting, but instead found myself in a swank high-rise greeted by several of Scott's executive staff from around the country. Scotts Miracle-Gro really rolled the red carpet out for us with their informative talks and the incredible hospitality.

Mr. Jim Tates, President - Southwest Region, gave us an overview of the company, particularly his region, and spoke about Scotts' partnerships and sponsorships. Scotts has 8,000 employees on 5 continents and has partnerships with Fortune 500 companies such as Home Depot, Lowes and Wal Mart. Mike Sutterer, V.P. of Marketing, then talked to us about how the company has evolved with the advancement of social media and sites such as YouTube. They have several videos online that show the proper way to use their products and they provide information for fans through Facebook and Twitter. They have a fulltime staff that monitors a 1-800 hotline to field any questions that arise about the products. They also have an e-reminder service in which people can be emailed recommendations for their yard based on their zip code and time of year. Dr. Jeff Garascia, Senior VP of Global R&D, gave us an overview of their products and some projects in the pipeline. The company's innovation strategy is centered on 3 things: simple, sustainable and significant. Scotts has the first homogenous lawn fertilizer and the first feed and weed product (where you can grow plants and kill weeds at the same time). Scotts is making strides in protecting the environment with the development of an edge guard to keep fertilizer from going on the sidewalk and getting washed into other water sources. Two products in particular are geared toward conserving water: Expand 'n Gro and Miracle-Gro Moisture Control Potting Mix take less and hold water longer. In an experiment done in Ohio, a tomato plant yielded 14x the yield of a tomato plant in native soil. EZ Seed is another popular product making up 3% of sales; this grass is known to grow virtually anywhere and is making skeptical landscapers more confident

around the nation. I encourage anyone reading this to go to Scotts Miracle-Gro's website to check out their products and services offered.

Chris Wible, Director-Environmental Stewardship, started out by stressing the importance of science being the foundation of policy decisions. Fertilizer has received some grief, mainly due to user error, but it provides great benefit in preventing valuable nutrients from running off. Scotts is taking measures to reduce their environmental impact in a number of ways. The company has committed to be phosphorus free by 2013. They are educating consumers on recycling clippings and are collaborating on urban outreach programs with NRCS and NACD.

Mike Shelton closed the session by talking about sustainability particularly in their products. Sustainability is a part of their business strategy and they are starting to push this more in their products by incorporating sustainability in packaging. They are targeting a move from 21% to 50% recycled content in their packaging by 2018. They will continue to develop products that need less water. By 2018 (their 150<sup>th</sup> anniversary) they are targeting a 50% reduction in landfill waste and a reduction of carbon emissions by 20%. In addition, through their GRO1000 program, they will plant 1,000 community gardens and green spaces by 2018.

I've used Miracle-Gro products in the past, but I wasn't that familiar with their products or company. I was very impressed with this visit and the company's innovation and look forward to utilizing their website and using their products. They were kind enough to give us a generous goody bag full of products to try and I really look forward to making my thumb a little greener.

# Reception

The "Urban Community Agricultural Industries" Social & Reception was hosted at Minute Maid Park in downtown Houston. We were able to hear brief presentations on today's lawn and garden industry in Texas.

The keynote speaker was Ag Commissioner Todd Staples. It is always a privilege to hear from Commissioner Staples as he does so much to fight for our industry. Not surprisingly, he talked about the drought (now the worst one year drought on record) and the over 15,000 fires that have scorched over 3.3 million acres of Texas land. He mentioned that drought is a good reminder that every water proposal needs to be put on the table; research and development is crucial. He continues to seek relief for Texans and encouraged us to pray for rain and try to remain optimistic during these tough times. He is making strides in raising awareness for agriculture. He likes to ask people "How many of you are involved in agriculture?" Often few hands go up so he asks, "How many of you like to eat?" This is a great way to drive home the point that everyone who eats needs to appreciate and support agriculture. Be sure to check out Commissioner Staples' blog at http://commissionertoddstaples.blogspot.com

After the reception, Mr. Dan Bergstrom, Senior Director of Major League Field Operations, gave us a tour of the Houston Astros playing field. This was a much appreciated experience and was neat to get to see the ballpark from the angle players see it.

# Wednesday, July 27, 2011

We left the hotel at 6:30am on Wednesday to travel to tour Glueck's Nursery. The early morning start was well worth it when we were welcomed into the Glueck's home with warm smiles and a spread of kolaches, quiches, and a variety of breakfast fare. The Gluecks started out in farming, but as the family expanded, they moved into trees as there is a higher margin and more control of the elements. They are a wholesaler and market primarily to San Antonio, Houston and Austin. They started from scratch with 7,000 live oak plugs and have since become a recognized name in the business. We will not soon forget the hospitality that this family showed us.

From Glueck's Nursery, we traveled to RiceTec Inc., a hybrid seed rice cleaning & processing facility. RiceTec owns 2 facilities. The one we visited in Eagle Lake is the newest facility at only 2 years old. We learned that there are only 175,000 rice acres in Texas and this is only expected to shrink with urbanization. As with all ag sectors, water is an issue. They have cut water usage by 25% over 10-15 years by laser leveling. The use of hybrid rice began in the 80s. It yields anywhere from 10-20% more than varietal rices, however the cost per acre for hybrid rice is much higher. This was an enlightening visit as many of us were not familiar with the ins and outs of rice farming.

We next traveled a couple of miles to Gertson Farms and, along the way, were able to see how low flying helicopters spread pollen. Gertson Farms is run by 3 brothers. It is a 4<sup>th</sup> generation operation in which they are involved in rice, cattle, hay grazer, sesame seeds, grain sorghum, wheat and crop dusting. They have 2 planes for crop dusting. Less than 3 gallons are used per acre. The planes have electrostatic booms, which he explained would cause the plants to receive the substance like a magnet. They work to reduce their environmental impact by recycling all jugs. In addition they have implemented laser leveling and have decreased their water usage by 30%. Water was again top of mind and will probably be the biggest issue facing this industry going forward.

We were hosted at the Gertson's home for a wonderful lunch sponsored by Gertson Farms Partnership & Lissie Flying Service, and Mr. Tom Kelley.

We then took a bus tour of one of our own classmate's operation. Michael Goudeau was kind enough to tell us about the ins and outs of his impressive operation. They farm rice and Alicia grass. The Alicia grass is more forgiving and is better for horses. They sell this high quality hay to Houston where they can get a premium for their product. The Goudeau's have been forward thinking in water conservation and recycle their water into a reservoir to be used again on the rice fields.

We traveled a short distance from Goudeau Farms to probably the most well known Brahman operation in the United States – J.D. Hudgins Ranch. Mr. Coleman Locke met us at the office and gave us a brief history and overview of the operation. The Hudgins ranch dates back to 1908 when J.D. Hudgins and his children formed a partnership to raise cattle. Today J.D. Hudgins Inc. operates as a family marketing co-op. They sell

cattle year round, of which 99% are private treaty. Hudgins cattle have been sold to 35 states and 43 countries. One of the bulls that attributed to J.D. Hudgins' legacy is Manso. All of their cattle go back to Manso and it is estimated that 75% of Brahman cattle from around the world can be traced back to Manso. Brahman cattle are known for the heat tolerance they offer to the commercial world. Brahman cattle, unlike other breeds, can sweat so they do not pant and suffer stress from the heat. I really enjoyed this visit; I had heard of the Hudgins name growing up because my grandpa used to buy bulls and show cattle for my mom and her siblings from the J.D. Hudgins Ranch. Their sustainability for over 100 years is a true testament to their credibility and management skills.

From J.D. Hudgins Ranch we traveled to a channel catfish farm in El Campo. Channel catfish is the primary species of farm-raised in the U.S. When we arrived they were shipping catfish to the processor. Four people were in the water pushing the fish up into a large net where an operator would use a crane like device to hoist the catfish over into the semi's overhead compartment where they are shipped live to the processing facility. The fish weigh around 1.25 pounds each. Fish farms have struggled the past five years, but are now breaking even as China imports are down.

Our last visit of the day was to Prasek's Hillje Smokehouse in El Campo. The smokehouse was started by the family in 1981, it has since moved into a large store that sells many food products from meats to bakery items. They have 120-135 employees. Most of their meat is bought through a broker, but most of their steaks are purchased from IBP. They make 35,000 pounds of sausage per week and have 45 different smoked meat products. They are vertically integrated and have their own distribution channel—Prasek Distributing—where they deliver smoked meat products to stores. They have 5 trucks on the road that serve 500 different stores. Demand has become so strong that they now sell products by mail order. There website is <a href="http://www.praseks.com/">http://www.praseks.com/</a>.

From the smokehouse we went straight to the "Cattleman's Night Social" where we were greeted by ~150 agriculturalists from the area and served a delicious ribeye dinner sponsored by Graham Land & Cattle Company, Dr. Charlie Graham. Senator Glenn Hegar was the keynote speaker. As expected, one of the first things he mentioned was the drought. Before he talked about the drought, he reminded us that we live in a blessed state, the best state there is. The drought has and continues to be tough, but there is not a group of more resilient people than those in agriculture. He talked about the extreme growth in Texas and how it is going to continue; we live in a place people want to call home. He closed by pointing out the strong bonds within agriculture, "Those that count ag as a part of their lives, no matter what happens, the alliances will hold strong."

# Thursday, July 28, 2011

# **Port of Houston Authority**

Thursday morning we visited the Port of Houston Authority. Roger Guenther, VP of Container Terminals, spoke to us first and gave us an overview of the operation. PHA It is an autonomous governmental subdivision of the state of Texas that is governed by 7

non-paid appointed commissioners. It was charted to create job growth and economic development. There are 8 public terminals owned and operated by the PHA. The PHA managed the 52 mile ship channel. 225 million tons of cargo are shipped annually. Houston is first in the U.S. in foreign tonnage. They are the 6<sup>th</sup> largest container port. Many tankers come here because Houston has the largest petro chemical refinery in the U.S.

Our next speaker, Ricky Kunz, Vice President of Origination, focuses on trade development and marketing. The origination department is working to get more distribution centers to serve from east of the Mississippi to Colorado. A new channel is being built in Panama for 12,000 TEU capacity ships (from 5,000 TEUs) so in order to service these ships, the channel in Houston will have to be deepened to 45 feet. Right now Houston can accommodate 8,500 TEU ships. The PHA is primarily an export market (65% vs. 35% for imports).

Next Mark Vincent, Director of Channel Development, from the U.S. Army Corp of Engineers spoke to us about dredging and channel development. His department also manages pipelines and issues marine construction permits. The departments focus right now is deepening the ship channel from 40-45 feet which will cost an astonishing \$600 million. Each foot of project depth lost because of limited dredging can cost the economy \$373 million / year. Depth is critical to commerce.

Aston Hines, Senior Manager of Environmental Affairs, spoke to us next about what the PHA is doing to lessen their environmental impact. They have partnered with Maersk and the EPA to influence shipping lines to burn cleaner fuel. In a pilot program the EPA said it would pay the difference between lower cost fuel and cleaner burning fuel. It was significant in reducing emissions. There is a global push toward sustainable development. Even within the office building of PHA, choices are being made to make the company greener. All cleaning products in the building are green; they recycle, and they have reduced water usage by 40% with water conserving toilets. They even have implemented daylight harvesting, where a room can sense when daylight is adequate and will dim lights accordingly. These practices will only become more and more common in the future and it was great to see PHA at the forefront in making these changes.

Mark Smith, Chief of Port Police, is the eyes and ears of the PHA. There are ~100 guards monitoring the area. The waterways are monitored by the coast guard. Mr. Smith's department does a great job everyday of ensuring that hazardous products or people don't make it onto our shores. It was pointed out by one of our classmates that we tend to only hear the negatives on the news and that we should be grateful for all the protection these guys provide us that has prevented several security issues over the years.

Angus Hanes, Assistant Terminal Manager of the Turning Basin, is focused on the area where ships turn around after unloading to go back on their route. This area sees non containerized ships – bulk, pallets, drums, wind blades and other objects that can't be put in a container. The turning basin handles 1,800 ships per year. It is the largest break bulk facility of its kind. Ships can get 6 miles from downtown Houston for great

distribution channels access. The turning basin is 1,000 feet. They have 2 million sq. ft. of open storage and 1.2 million feet of covered storage. The facility has the capability to load 100 tons / hour of packaged bulk goods.

Mr. Guenther then revisited our group to talk about the container terminal operations. PHA handles over 1 million containers. Plastic resin makes up 1/3 of products shipped out; this plastic is shipped to China to make toys. The terminal is open 24/7. For 2011 they forecast 1.8 million TEU, 65% exports, more than 900 working containerships, and \$130 million in revenue. Trends expected are bigger ships and deepened channels.

I found this visit to be particularly interesting because I focused on container shipping companies while I worked in investment banking in New York. I have to admit I was a little giddy over hearing the lingo and having the opportunity to tour the port and see those majestic container ships. The shipping industry is a key economic indicator of the health of global trade. The staff at PHA expected this trade to continue to pick up over the years.

I did want to mention our sponsor for lunch—Oscar & Denise Taylor of Bonfire Wings. Oscar was a member of TALL VI. He and his wife own two Bonfire Wings locations. These wings were absolutely delicious and the rice was unbelievable. If you live in the Houston area or are passing through, be sure to stop by one of their locations.

# Cargill

We arrived at Cargill and, believe it or not, had to run from the bus to their front door to avoid getting drenched by the hard falling rain. In hindsight, I'm not sure why we didn't all just stop and let it soak in or dance in it just to fully convince ourselves that rain does exist. We were met by Michael Allen and Bart George, Grain Merchants for Cargill. Mr. Allen spoke to us about the grain commodities. He thinks that prices will keep going higher because carryout numbers continue to dwindle. Cargill has a 6.1 million bushel storage capacity. They have the capacity to ship 300 millions bushels per day. Wheat makes up 75% of the grains exported from the port. They also ship durum, barley, oats, sorghum, corn, soybeans and soybean meal. Exporting is half of what it was last year because Australia and Argentina both have good crops. 75% of products come to Cargill by rail. A 100 car train holds 400,000 bushels; they can unload 100 cars in 8 hours and unload 12-15 trucks per hour. Some of the top buyers are Cargill Mexico, Cargill America, Bunge and Seaboard. The top countries shipped to are Mexico, Nigeria and China. The guys at Cargill also expected a continued pick up in global trade and expected to see the Houston ship channel to increase traffic by 25%.

#### **HPD Ride-Along Program**

I must admit when I heard that the HPD Ride-Along Program involved pulling an "all-nighter", I was less than ecstatic. I pulled enough all-nighters while working in investment banking that I now avoid them like the plague. Thankfully we had about 4 hours of free time before the program, which I happily utilized with a long nap to prepare

for the night's events. I was assigned to the 18<sup>th</sup> district in the Midwest area of Houston. I was assigned to Officer Reyes, who is from the Houston area and has been working with the department for about 3 years. Our first call was a domestic dispute at a ritzy condominium between a 70ish year old daughter and her 89 year old mother. It turns out that there wasn't much to see and a call to the police wasn't really warranted, but it was comical nonetheless to see one extreme of the types of calls officers receive. We had a lag for about an hour after that in which we had time to go tour the station. After that, things began to pick up a little. We made a couple of traffic stops. One involved no lights, an open container, no insurance and no license. The individuals in the car were lucky they didn't get loaded up and taken to jail; instead the driver got hit with four tickets. From there we went to assist with a stop that had already been made. The guy they stopped had had 19 prior drug arrests and was found with drugs on him once again, so he was hauled off to jail for the 20<sup>th</sup> time. Though it was exciting to see the officers search the car and the 2 guys in the car, the most entertaining part by far were the tow trucks that just kept on coming and coming and coming. It started with 2 and by the time we left there had to be at least 14 of them there. They were like a pack of buzzards waiting to pounce on a carcass. They squabbled over who got there first and once they finally settled it, the other 13 wreckers who didn't get the job raced off into the dark streets to seek out the next victim. By that time it was about 2:30, so we went to a McDonalds parking lot where all of the bar crowd goes at closing time. As we were pulling up to the parking lot a young guy ran up to our police car, knocked on the window and said that a guy had just accused him of hitting his car and pulled a pistol on him. Officer Reyes parked, grabbed his shotgun and suggested I stay in the car with the doors locked; I quickly & eagerly obliged. I was thankful I was in a cop car where I presumed I was safe because the parking lot was an absolute madhouse and I'm afraid if I was in a normal car I may have been noticed for gawking. There were a sea of people in the lot with a blatant disregard for the officers (there were 3 police cars); they mocked and continued to loudly play music even after the officers told them to stop. Apparently the bar attire in that part of Houston for women is "less is more". I was more than happy to get out of there without incident. Our next call involved a stalled car in the middle of an intersection. Well, the car was not stalled, it merely had an incoherent driver. The driver was passed out drunk in the *middle of an intersection* with the car in drive! He's lucky he didn't harm or kill anyone. It took us a minute to actually get to the car because of the tow trucks swarming the scene. They all put their names in a hat for the tow; the winner was drawn and the rest of them grumbled back to their trucks. I was able to see the officers do the sobriety tests. The guy was hauled off to jail where his fate would be determined. It was about 4am at this time and things had slowed down, so we went to have lunch/breakfast/dinner whichever it was and then I was escorted back to the hotel. I must say I actually had a lot of fun on the HPD ride-along, but it was also eye-opening and sobering to see just how very different rural and urban areas really are. A big thank you to the Houston Police Department for this opportunity.

Friday, July 29, 2011 Exxon Energy in the 21<sup>st</sup> Century

Mr. Steve Maples, Project Manager at ExxonMobil Production Company, was our final speaker of the trip. Thankfully the meeting was not scheduled until 10:00, so we were able to get at least a few hours of sleep. Mr. Maples thought that energy prices would stay high because of growing energy demand. World population growth is projected to be up 15% in the next decade. He explained that developed nations should decrease their demand for oil due to energy efficiency and new technologies, while developing countries will increase their demand. He believes that natural gas will be the leader in the years to come due to its availability, clean burning properties and its ability to now be transported in tankers in the form of liquefied natural gas (LNG). By 2030 it is projected that there will be 8 billion people and a 100% increase in GDP, which will translate into a 35% increase in energy demand.

# **Summary**

The Houston session provided many of us an opportunity to learn about other sectors. Rice farms, catfish farms, Brahman cattle and ships are not something that most of us see in our respective areas. I really enjoyed learning about these sectors and their opportunities and challenges. One issue that remains a challenge across all sectors is water usage and drought. As agriculturalists, water has quickly become our most valuable resource and we need to be taking steps to conserve and protect it. I'm so grateful to all of the wonderful sponsors and to those that opened the doors to their operations. Hopefully the next time our TALL class meets, we will be talking about the rain that has been falling throughout the state.