

Texas A&M Animal Science

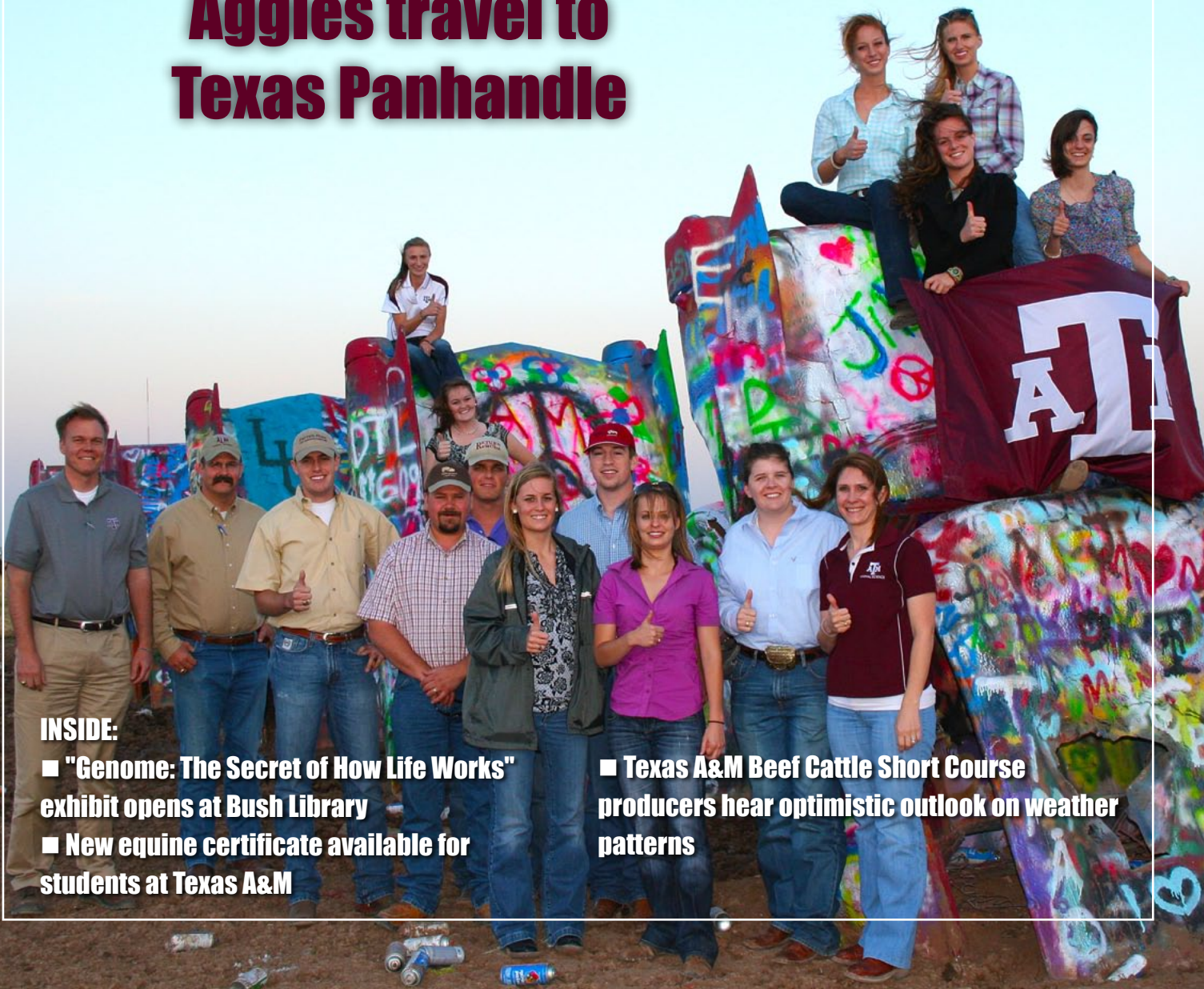
# MONTHLY

AUGUST 2012 | A monthly publication from the Department of Animal Science at Texas A&M University.



Cattle, Cadillacs & Beef Capital of the World:

## Aggies travel to Texas Panhandle



### INSIDE:

- "Genome: The Secret of How Life Works" exhibit opens at Bush Library
- New equine certificate available for students at Texas A&M

- Texas A&M Beef Cattle Short Course producers hear optimistic outlook on weather patterns



## Summer of learning

When classes ended in the spring, some students took a break from school to relax, worked a summer job or spent time vacationing with their families. Others stayed in College Station for summer classes while others took advantage of the opportunities available at Texas A&M.

In this month's newsletter, I am excited for you to read about a few of the trips and experiences our animal science students were engaged in over the summer. You will read about the newly-formed Jim Theeck '65 Beef Cattle Seminar Tour of the Texas Panhandle, a student's per-

spective of her study abroad trip to Brazil, undergraduate students conducting research in animal physiology, and highlights from several successful internships with top businesses. Also, several students spent six weeks in New Mexico studying large herd dairy management. All of these high impact experiential learning opportunities (as they are officially referred to on campus) provided invaluable real-world experiences for these students. Combine these with the comprehensive education they receive in the classroom, and our department continues to produce top-ranked students ready to become leaders in their field.

This fall, the department will welcome a record-breaking number of freshmen into our program. One new opportunity we will be offering is the Equine Certificate that was recently established and will be available beginning this fall to students interested in pursuing work in equine sciences and/or industry. This is just one example of our commitment to providing our students with the best educational experience possible.

Stepping outside the classroom, the recent 58th annual Beef Cattle Short Course welcomed more than 1,400 participants to Rudder Tower and the newly-remodeled Memorial Student Center. Through the combined efforts of the Extension specialists in our department, the BCSC serves as an invaluable educational resource to beef producers in Texas and continues to enjoy the reputation as the largest beef cattle educational opportunity in the country.

On August 25, the exhibit "Genome: The Secret of How Life Works" opened at the George Bush Presidential Library and Museum. Our department has partnered with Texas A&M AgriLife Research, the Whole Systems Genomics Initiative and the Bush Library to present the achievements of Texas A&M faculty, staff and students in the area of genomics. I encourage you to find time to tour this impressive exhibit that runs through July 2013.

As you'll be able to see by reading this month's newsletter, it's been a busy and productive summer. I am so proud of our students for their willingness to venture out this summer and represent Animal Science and Texas A&M in such positive ways. I am anxious to see what the fall brings!

H. Russell Cross, Ph.D.  
Professor and Head  
Department of Animal Science

# Texas A&M Animal Science MONTHLY

Published monthly by the Department of Animal Science within the College of Agriculture and Life Sciences at Texas A&M University to keep current and former students, stakeholders, industry and trade organizations, and friends of the department informed on the accomplishments and discoveries achieved by one of the nation's most prominent and complex departments of its kind.

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### On the cover:

Students participating in the Jim Theeck '65 Beef Seminar Tour visited the famous Cadillac Ranch near Amarillo after a week of touring beef production facilities located in the Texas Panhandle.



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## Study focuses on feeding beef cattle

# algae

# co-products



Post-extraction algae residue powder is processed into small pellets and fed to cattle.



COLLEGE STATION – Algae typically is not associated with cattle feed, but a group of researchers in the Department of Animal Science at Texas A&M University has found interesting results that may change this in the future.

Animal Science graduate student Merritt Drewery, Dr. Tryon Wickersham, associate professor, and Dr. Jason Sawyer, associate professor, are working to determine the feeding value of post-extraction algal residue, the co-product resulting from algal biofuel production. This research is part of a bioenergy program led by Texas A&M AgriLife Research and is supported by the Department of Energy through the National Alliance for Advanced Biofuel and Bio-Products.

“One of the key factors in the success of algae as a biofuel is finding suitable markets for the residue. The beef cattle industry is an established user of co-products such as distillers’ grains, glycerol, cottonseed meal and soybean meal,” Wickersham said. “We may be able to use post-extraction algal residue as a source of nutrients for all classes of beef cattle.”

Through a series of studies completed this June, researchers determined palatability and nutrient availability of post-extraction algal residue to cattle fed a forage diet, with the primary objective of determining the effectiveness of post-extraction algal residue as a protein supplement. In a companion project, researchers located at the Texas A&M AgriLife Research and Extension Center at Amarillo, are evaluating the inclusion of post-extraction algal residue in feedlot diets.

“The first project tested palatability,” Drewery said. “We offered 12 different supplements

with different levels of algae inclusion. We measured how long they took to completely finish the allotted supplement.”

Surprisingly, the steers were not picky eaters as they widely accepted the algal residue in a processed form, the researchers said.

Supplements with algae were offered at 2.2 pounds per day and the steers were given an hour to consume them. The algae co-product, which is 20 percent crude protein, was blended with dried distillers’ grains or cottonseed meal at 0, 20, 40, 60, and 100 percent blends.

“The algae could be blended up to 60 percent with distillers’ grains or cottonseed meal without significantly altering palatability,” Drewery said. “The study results show a 54 percent completion rate and lower rate of consumption when the algal co-product was offered alone.

“In the second project, we compared supplemental post-extraction algal residue and cottonseed meal and found forage intake and utilization were stimulated to a similar extent when algae was used.”

Angus steers in this project had free choice to low-quality hay (4 percent crude protein), and supplements were administered ruminally to ensure complete consumption.

“We administered the supplement in the morning just prior to feeding hay,” Drewery said. “Supplementation rate was based on steer body weight and previous research conducted at Texas A&M.”

“This project indicated post-extraction algal residue is an effective source of supplemental protein for cattle consuming low-quality forage,” Wickersham said.



The Texas A&M Agrilife Research and Extension Center in Pecos, Texas, houses an algae demonstration facility with two sets of four ponds each, one large pond feeding into or from three smaller ponds. This facility produced a portion of the post-extraction algae residue used in the research conducted to determine the value in feeding the co-product to cattle.

In the third experiment, steers were allowed access to supplements of post-extraction algal residue or cottonseed meal over the duration of an entire day.

“We were worried they wouldn’t eat the entire amount of the algae supplement this time around, but there weren’t issues with supplement refusals,” Drewery said.

In visual observations, the steers would eat half of the algae supplement within 10 minutes, finishing the rest sometime during afternoon hours.

“They would also eat hay and drink a lot of water after consuming the algae,” she noted.

The final project was initially designed to test a final blend of post-extraction algal residue and other feedstuffs to create a complete supplement.

“However, based on our observations in projects one and two, we were confident steers would consume post-extraction algal residue without the addition of other ingredients if given a long enough time to consume the feed,” Wickersham said.

There is additional information to be determined, he added, including determining the market value of post-extraction algal residue in the beef industry compared to distillers’ grains and cottonseed meal, common ingredients found in cattle feed today.

Also, the researchers are attempting to get the algae in a form that is “easily deliverable to cattle.”

“We are trying to identify the best processing method to feed it to grazing cattle,” he said.

“The algae co-product is high in salt, as the algae is a saltwater product.”

“Crude protein is 20 percent, but half of the chemical composition is ash,” he said. “In comparison to cottonseed meal, you have to feed twice as much algae to get the same effect. In the beef industry, traditionally the cow-calf operator pays more for protein than the feedlot side. That’s something we have to consider. Additional research is required to fully explore the value of feeding algae to grazing cattle.”

In addition, future research will evaluate feed delivery systems for post-extraction algal residue as well as different types of algae and production processes.

“While algae as bio-fuel is in the developmental phase and it will likely be a few years before large quantities of post-extraction algal residue become available to beef cattle producers, this research can immediately be used by algal biofuel producers to estimate the market value of post-extraction algal residue,” he said.

Wickersham concluded, “long-term, if algal biofuel production reaches commercial scale, our research will create a foundation for future research focused on using post-extraction algal residue as a source of nutrients in beef cattle systems.”



Drewery analyzes the chemical composition of post-extraction algal residue and conventional protein supplements.

Educational tour brings  
Animal Science students to the

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# BEEF CAPITAL OF THE WORLD

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By Courtney Coufal



Participating in the Jim Theeck '65 Beef Cattle Seminar were, *left*, Donna Witt, Bill Mies, Victoria Pilger, Stephanie Rasmusson, Alyssa Word, Jessie Hoffman, Kyle Weldon, Jenny Bohac, Baylie Miller, Joshua McCann, Levi Trubenbach, Courtney Stefan, Jason Sawyer, Holly Edwards, Cole McQueen and Tryon Wickersham. Not pictured, Liz Schusterman.



**Left:** Students tour White Energy, an ethanol plant, in Hereford, to gain awareness of the process and challenges associated with converting grain into ethanol and distillers' grains. Additionally, students learned how ethanol plants manage variability in distillers' grains. **Middle:** Students look at a steam flaker from the bottom of a feedyard. **Right:** Donnell Brown, center, discusses bull development at RA Brown Ranch.

TEXAS PANHANDLE – Hereford, Texas, is one of six major cities located within the Texas Panhandle and is known as the “Beef Capital of the World.” This town, deeply rooted in cattle and agriculture, also was one of the many places visited by a group of Texas A&M University Animal Science students traveling the High Plains region while studying the many aspects of beef cattle production.

This group of Aggies departed College Station on May 13, 2012, and set out on the inaugural Jim Theeck '65 Beef Cattle Seminar Tour. Designed as a May-mester course, the tour led seven undergraduate and six graduate students along with Dr. Tryon Wickersham, associate professor; Dr. Jason Sawyer, associate professor; Dr. Bill Mies, visiting professor; and Donna Witt, animal science academic advisor, on a 5-day educational tour of Texas ranches, cattle feeding and grain processing operations, feedlots, a packing plant, an ethanol plant, a brokerage firm, a dairy, visits with key beef cattle businesses regarding employment and internships and concluded with a brief stop at the famous Cadillac Ranch.

Wickersham, who serves as one of the instructors of the course, said the goal of the tour was to take these students inside the beef industry to provide them with a greater understanding of what they've already learned in the classroom.

“There is no greater scale of beef cattle facilities in the world than in the Texas Panhandle. We wanted to give these students a look at the entire beef industry from cow/calf to harvest, and the heavy concentration of facilities in this region made this possible, Wickersham said.

“This experience gave our students the opportunity to see every phase of the beef cattle industry, showed them the possible jobs that may be available to them after graduation and allowed them to network with industry leaders and professionals.”

Along the way, each student kept a journal of each visit. “Before each stop, we'd talk about what we wanted them to gain from that stop and things they might think about asking and consider about that visit. As we moved on through the trip, we tried to relate the previous stop to the next, compare them and see how they work together,” Wickersham said.

Jessie C. Hoffman, a junior from Kenedy, Texas, said this was her first time to really see how the Texas beef industry works. Growing up in Billings, Montana, Hoffman said that Texas is a lot different from her home state and this trip gave her a new appreciation of how big the beef industry's impact is on the entire state.

“This trip added to my perspective of the Texas beef industry. The Panhandle is more than just feedlots, it's so much bigger,” she said. “The Texas beef industry is like a puzzle, each person, along with their talents, fit together to make it work. Each of the different professions we visited interact with each other and build off of another's successes. Without each piece, it wouldn't work the way it does. Our future, as students of animal science, is to fill in the many roles that make up each piece.”

Seeing the different aspects of the beef industry, Hoffman has a new confidence about getting a degree in animal science.

“It is motivating to see the variety of ways in which I will be able to use my degree. Being able to get a first-hand look into the many aspects of the industry was very beneficial and insightful.”

## JIM THEECK '65 ENDOWMENT

The Jim Theeck '65 Beef Cattle Seminar Tour was possible thanks to a generous gift made to the Texas A&M Foundation in memory of a man who played a significant role in the progression of the Texas beef industry and who was known nationwide as a cattle industry expert. The Jim Theeck '65 Endowment was established by the George and Anne Butler Foundation to be used to provide a beef cattle seminar course for students administered by the Department of Animal Science.



Jim Theeck '65

George and Anne Butler owned Mayfair Ranch in Brenham, Texas. In 1967, Theeck went to work as



**Left:** Dakota's Steakhouse in Hereford. **Right:** Dr. Hollis Klett, far right, discusses the research yard and the role of nutritionists at OT Feedyard.

## BEEF SEMINAR TOUR STOPS

**Triangle Ranch in Paducah**  
Commercial cow/calf and stocker

**Bradley 3 Ranch, Ltd. in Memphis**  
Purebred cattle and genetics

**TCFA in Amarillo**  
Cattle feeding

**Ferrell-Ross Manufacturing in Hereford**  
Grain processing

**Hereford Feedlot/Ferrell-Ross in Hereford**  
Grain processing

**Elanco in Amarillo**  
Employment and internships

**Cargill Beef in Friona**  
Packing plant

**White Energy in Hereford**  
Ethanol plant

**OT Feedyard in Hereford**  
Feedlot nutrition and management

**NSA in Hereford**  
Employment opportunities

**Cactus Feedyard in Cactus**  
Feeyard

**Faria Etter Dairy in Cactus**  
Large dairy operation

**Alltech in Amarillo**  
Employment opportunities

**Amarillo Brokerage in Amarillo**  
Commodity trading, risk management

**R.A. Brown Ranch in Throckmorton**  
Purebred cattle and personal success

general manager of the ranch and devoted 30 years to Mayfair Ranch.

While at Mayfair, Theeck set the standard for the modern day Brahman x Hereford F1. He developed one of the nation's first commercial replacement female sales using Brahman x Hereford F1s and Brahman x Angus F1s both crossed with Santa Gertrudis bulls. One of his

and above all, one of my greatest influences," she said.

After Theeck passed away in 2011, Allison said her family searched for the best way to honor a man who was such an important figure in the beef industry world and in their lives.

"As a cattleman, as an Aggie, and as an individual with such high regard for

"Jim Theeck believed in Texas A&M's education system, but he also believed in learning from experience. The beef seminar tour combines both forms."

► Allison Grainger

true passions was developing a market for heifer calves.

"In the 1970s, when he was putting this cross breeding program together, most cattlemen took a discount on heifer calves at the auction barn. Because of his foresight, many breeders adopted his plan and marketed the heifer calves for a premium over the steer calves," said Allen Grainger, grandson of the Butlers.

In addition, Theeck spoke widely about the importance of marketing purebred cattle to commercial cattlemen, started and conducted both local and national 4-H and FFA youth programs, bred several national champion bulls and females and ran a highly successful commercial operation of his own called Walking T Cattle Company.

Over the years, Theeck became a major influence in the lives of this family, including Allison Grainger, great-granddaughter of the Butlers and current student at Texas A&M studying agribusiness with a minor in Spanish.

"Mr. Theeck was a part of my life from the day I was born. He was my next-door neighbor, my close family friend, my go-to-man for beef industry advice,

education, this option seemed the most fitting," she said.


To the Graingers, using the Jim Theeck Endowment towards the establishment of the Beef Seminar Tour provided a way to combine Theeck's appreciation for education and his belief that youth learn best from experience.

"One of Jim Theeck's missions in life was to educate youth, whether that be in the importance of a strong work ethic and family values, in our nation's necessity of a successful agriculture industry, or in the growing opportunities and challenges of raising beef cattle. He believed in Texas A&M's education system, but he also believed in learning from experience. The beef seminar tour combines both forms."

"We were pleased not only with the quality of the participants but with the diversity of opportunities provided to them through this tour. Jim Theeck would certainly be proud of the education benefits of this tour and its ties to the beef industry as it currently operates," she added.


The Jim Theeck '65 Beef Seminar Tour will be offered every May for students interested in learning firsthand how the beef industry operates. ■





# Genome

The Secret of How Life Works™

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## Exhibit opens at Bush Library

COLLEGE STATION – A traveling exhibit called “Genome: The Secret of How Life Works” will explore the nature and impact of our genes through visually-rich environments, interactive displays and family-friendly activities. The exhibit opened Aug. 25, 2012, at the George Bush Presidential Library and Museum in College Station.

The exhibit, scheduled to run through July 5, 2013, is sponsored by Texas A&M AgriLife Research in cooperation with the Texas A&M University Whole Systems Genomics Initiative, the College of Agriculture and Life Sciences, and the Department of Animal Science, along with media partner KBTX Media.

In 1989, President George H.W. Bush signed into law the appropriations for the Human Genome Project. The project of mapping the human genome was completed in 2003. It accomplished its mission of identifying more than 20,000 genes in human DNA and determining the complete sequence of the 3 billion DNA subunits (basis of the human genome).

A portion of the remaining funds from the Human Genome Project was made available for genome research in animals and included funding awarded to the Baylor College of Medicine in collaboration with Texas A&M University for the Bovine Genome Initiative. The genome sequence of cattle was published in 2009. Faculty and students in the Department of Animal Science and the College of Veterinary Medicine and Biomedical Sciences were instrumental in this effort.

The traveling genome exhibit is designed for all ages and explains the discoveries made as a result of the Human Genome Project including the secret codes that make us who we are and influence who we might become. The exhibit provides visitors with the opportunity to explore the depths of DNA in a way never before possible.

“We are excited to partner with the George Bush Presidential Library and Museum to showcase both the accomplishments of the Human Genome Project and the important contributions to many genome projects made by Texas A&M students, staff and faculty,” said Dr. Penny Riggs, assistant professor in the Department of Animal Science and chair of the exhibit steering committee.

“These exhibits provide a wonderful opportunity for us to share our work with the community, and to show how this research leads to advancements in agricultural productivity, human and animal health, and influences economics, policy, ethics, and business.”

In conjunction with the genome exhibit, rotating ancillary exhibits will highlight the achievements of the Whole Systems Genomics Initiative, featuring genomics research conducted at Texas A&M University and Texas A&M AgriLife Research

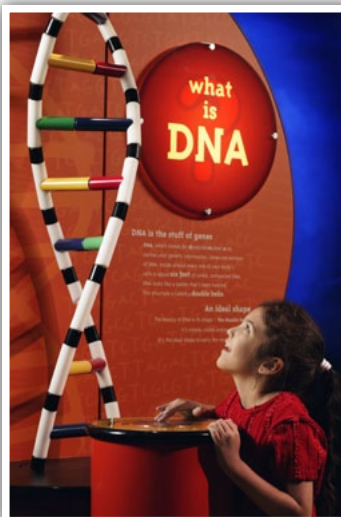


Photo by Evergreen Exhibitions.

such as the Bovine Genome Initiative and the Brahman bull cloning project (Second Chance).

An opening gala is scheduled for Sept. 6 at 6:30 p.m. to formally launch the exhibit. Related events also will be held at the library in conjunction with the exhibit including the Texas Genetics Society annual meeting April 25-27, 2013.

Additionally, a series of speakers will present information on the relevance of genomics in society. Dr. Ronald L. Phillips, regents professor emeritus from the University of Minnesota, will serve as the first speaker on Sept. 18, 2012, at 7 p.m. at the library. He will present, “Norman Borlaug and the future of the Green Revolution.” RSVP to Tracy Paine at [reservations.bush@nara.gov](mailto:reservations.bush@nara.gov).

For more information on “Genome: The Secret of How Life Works” traveling exhibit, please visit [bushlibrary.tamu.edu/genome](http://bushlibrary.tamu.edu/genome). For more information on the Whole System Genomics Initiative at Texas A&M University, go to [genomics.tamu.edu/](http://genomics.tamu.edu/).



# Across BRAZIL in 18 days



By Liz Schusterman  
Senior, Animal Science

Six Aggies study, compare ruminant production systems.

Ruminant animals (cattle, sheep, goats and water buffalo) have a distinct ability to convert human inedible resources into animal products (milk and meat) for human consumption. Brazil and the United States have different ruminant productions systems, but together they have the largest commercial herd of ruminant animals in the world. This June, Department of Animal Science students, Ashley McRay, senior from Devine; Melissa Bean, senior from Houston; Liz Schusterman, senior from Katy; Alex Mulliken, senior from Plainview; Hanah Georges, sophomore from El Paso; and Jose Moreno, graduate student from San Pedro Sula, Honduras, spent two weeks in Brazil exploring two different ruminant production scenarios and comparing them with those used in the U.S. Read about their daily journeys and educational experiences while studying abroad as part of the Comparative Ruminant Production program.

**JUNE 3** All six Animal Science students led by Dr. Luis Orlando Tedeschi, associate professor in animal science, arrived in Recife, Brazil. The city of Recife is located in northeast Brazil and is situated on the Atlantic coast.

It is a large commercialized city that was once the capital. Tourism prevails here because of the beautiful, luring beaches and fascinating culture and history. We first toured the neighboring city of Olinda, which is one of the oldest cities in Brazil. The buildings are colorful and traditional and the cultural ambiance is appealing. As Olinda is a bit more elevated, we all enjoyed looking over the big city of Recife and watching the sun set. It was the perfect way to end our first day in Brazil.



**JUNE 4** We began the week at our partner university in Brazil, Universidade Federal Rural de Pernambuco (UFRPE). Dr. Jose Carlos B. Dubeux Jr., professor, led our classes and visits at the university. Seven of their students joined us the entire week and it was fun to get to make new friends and learn about their programs. We completed classes in Brazilian biomes, regional forage production and small ruminant systems used specifically in this country. This tropical region of Brazil is home to the majority of the sheep and goat production nationwide. We also had the great opportunity to go to four facilities and farms to see firsthand how these programs are implemented.

Tuesday, we traveled to a nearby city called Itambé to visit an experiment station for tropical grasses and legumes. They have a huge property where they grow everything including sugar cane. We even got to try the sugar cane right there in the field!

**JUNE 5**

**JUNE 6** We stayed at UFRPE in the classroom and we heard lectures from three different professors from the university. They taught us about forage species in Brazil, forage physiology, sheep and goat breeds in Brazil, and nutritional development for those breeds.

**JUNE 7** On Thursday, we traveled to the Caratá Farm, which is home of the leading sheep and goat breeding and genetics in the region. It is an extremely nice facility with the most advanced technology. They own the best-of-the-best sheep and goats. Later that day, we visited a small goat farmer in the small city of Bezerros. It was a simple operation with a little over 100 head of goat. He raises strictly meat goats and sells them to be slaughtered. It was interesting to get to see to whole spectrum of sheep and goat production in Brazil.



**JUNE 8** We visited a cactus experimental station in Caruaru. Cactus is an important source of nutrients to ruminants in this region because it is semiarid and receives little rainfall. This year, they are experiencing a drought, thus making the cactus especially essential for feeding. They experiment with different types of organic and mineral fertilization and harvesting times.

*"The first week was a fun and extremely eye-opening experience for me. I grew to appreciate even more how different regions must adapt to their climate by using different species, breeds and types of forages and animals. The region here does well for what they have and what they lack. I liked being able to see this region and compare and contrast it to our systems in the United States."*

**JUNE 10** The next nine days were spent in Pirassununga, São Paulo, Brazil. It is located in the interior of the state of São Paulo and about three hours northwest of the huge city of São Paulo. On Sunday, July 10th, we flew into the city of Campinas, which is where the closest airport to Pirassununga is located. After getting picked up at the airport, driving an hour to the hotel and getting some lunch, we got settled at our new stop. Last year, I spent six months here in Pirassununga on my Reciprocal Exchange program so I am very familiar and comfortable with the city and how to get around. I took the other students for a little tour of the main area of the city. Pirassununga is a smaller city with a population of about 70,000 residents. It is a safe and pretty tranquil town.

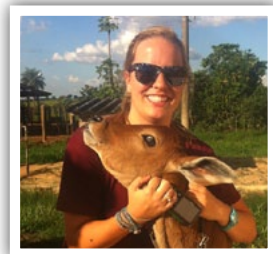
**JUNE 11** On Monday, we traveled to the city of São Paulo to visit a large livestock show called Feicorte. It is a fair and show for just meat animals including sheep, goat and, of course, cattle. This was a great experience because we got to see all the different breeds used in Brazil. We walked around all day and saw some exhibitors showing cattle. The breeds here in Brazil are very different from in Texas. A really cool thing that happened was my professor and I were interviewed for a TV program at the show. They asked me to explain the importance of us students visiting Feicorte and how it will help us with our course. It was awesome!



**JUNE 12** We began classes in beef cattle production, comparing Brazil and the U.S. We also toured the facilities at the university that hosted us, Universidade de São Paulo-Faculdade de Zootecnia e Engenharia de Alimentos (USP-FZEA). The university and region is extremely different from where we were in Recife. The region is much more like Texas. It gets more rain and has similar agriculture practices. The university campus is enormous and is composed mainly of pastures with cattle grazing on them. There are buildings scattered throughout the campus for classes and research in Animal Science, Veterinary Medicine, Food Engineering and Biosystems Engineering. It is a beautiful campus but I'm a bit biased because I lived here and have many memories.

**JUNE 9** On Saturday, we had the privilege to go to the suitably dubbed "most beautiful beach in Brazil." It is called Porto de Galinhas and consequently attracts many tourists. We spent the day relaxing on the beach, drinking água de coco and building friendships with the Brazilian students. We all grew very close which made the time to say goodbye quite difficult.

**JUNE 13** We visited two very different dairy farms nearby, in the city of Descalvado. The first one, called Agrindus, is very well known and is one of three operations in the nation that fabricates its own yogurt and milk right there next to the milking parlor. Embrapa, Brazil's agriculture research organization, runs the other farm we visited. It was much smaller and used strictly for forage research.



**JUNE 14** Thursday, we stayed in class most of the day and learned about dairy cattle production in Brazil. We also toured the dairy facilities on campus and ate fresh goat ice cream!



**JUNE 15** Friday was water buffalo day. This was my favorite part because I worked a lot with the water buffaloes last year during my exchange. We also went to a nearby water buffalo farm that makes mozzarella right there on the property. They have a pretty average size herd and have very nice facilities.

On Saturday, we had our fun adventure day, and went to Brotas, São Paulo to go hiking and river rafting. It was one of the most fun things I've done. I had such an amazing time with the other students and professors. We laughed a ton!

**JUNE 16**

**JUNE 17** Sunday we had free and spent most of the day preparing our presentations for Monday. Everyone did a great job presenting and clearly showed how much they learned these past two weeks. It's been really neat to see everyone learning a lot (including me) and growing in their appreciation for international agriculture. Tuesday, July 19th, everyone left and headed back to Texas, sadly.

It has been a memorable 18 days in Brazil. I have grown very close to each of the other students and look forward to reuniting with them soon! I will never forget these wonderful times here learning about animal production in Brazil.

# Texas A&M Beef Cattle Short Course

## producers hear optimistic outlook on weather patterns

by Blair Fannin  
*AgriLife Communications*

COLLEGE STATION – Texas beef producers attending the 58th Texas A&M Beef Cattle Short Course in College Station looked intently at several maps depicting future weather patterns across the Lone Star State.

Brian Bledsoe, weatherman for the *Southern Livestock Standard*, was one of several featured speakers Monday during the general session at Rudder Auditorium on the Texas A&M University campus. Bledsoe said the current weather patterns are reminiscent of the 1950s, but predicted West Texas and states such as Colorado, Oklahoma will leave hot temperatures and drought behind sometime this winter.

“When it breaks, it’s going to break big-time,” Bledsoe said.

This year’s short course, which has attracted more than 1,400 beef producers from across Texas, the U.S. and abroad, had beef producers wanting more information about climate outlook and how to build back herds, said Dr. Jason Cleere, conference coordinator, Texas AgriLife Extension Service beef cattle specialist and associate professor in the Department of Animal Science. The annual event held Aug. 6-8 in College Station is coordinated by Texas A&M AgriLife Extension beef and livestock specialists and hosted by the Department of Animal Science.

“Judging by topic selection, forage and drought recovery sessions were highly attended, which

indicates there’s big interest in herd rebuilding in Texas,” Cleere said.

The driver for future weather change in Texas will be weather-maker storms on the West Coast this winter, which models indicate to be wetter than normal, Bledsoe told the group.

“That’s where our weather is going to come from,” he told attendees, pointing to California and upper coastline states, where shades of blue on the map indicated moisture.

Meanwhile, this winter, cold weather is predicted for November-January from the tip of Dallas up through the Midwest.

Bledsoe said at least through the first couple of months the 2013 El Nino “will play some role in at least temperature,” especially during the months of February, March and April.

“It stands to reason Texas and the Gulf Coast will be colder than normal for winter,” he said. “Moisture will come and East Texas is predicted to be wetter than normal.”

Dr. Ted McCollum, AgriLife Extension beef cattle specialist, Amarillo, gave a comprehensive virtual video tour of a feedlot operation. He walked beef producers through the process, beginning with a truckload of cattle backing up to a loading chute and then going through a health program.

Feeder cattle were fed a ration of 25 pounds a day and the detailed video showed a series of computerized gauges monitoring various commodities and feed bins. McCollum was followed by a virtual tour of a packing operation led by Drs. Dan Hale and Davey Griffin, AgriLife Extension meat specialists, College Station.



Weatherman Brian Bledsoe discusses current weather patterns and suggests Texas and the Gulf Coast will be colder than normal for winter.



Dr. Jason Cleere, right, dedicates the 2012 Beef Cattle Short Course to Dr. L. R. Sprott for his service to the Texas beef cattle industry and the Texas A&M University System. Sprott was professor and Extension beef cattle specialist for the upper gulf coast from 1981 until his retirement in 2003.



Meat science graduate students Lindsey Mehall and Carson Ulbrich serve prime rib at the Texas Aggie Prime Rib Dinner held Monday night in the Grand Ballroom of the newly remodeled Memorial Student Center. The prime rib was prepared by Dr. Davey Griffin and the meat science faculty, staff and students.



1,450 people from Texas, 18 states and four countries gathered for this year's short course including the trade show featuring 127 companies and industry groups.



Animal science sophomore Victoria Pilger, *left*, and graduate student Jasmine Dillon address short course participants in Rudder Tower to explain the Farmers Fight effort started at Texas A&M this spring and encourage the short course participants to join in the effort as "advocates."

Dr. Lowell Catlett, a Regents professor, dean and chief administrative officer at New Mexico State University's College of Agricultural, Consumer and Environmental Sciences, provided insights and an outlook on the agriculture industry, specifically beef-cattle production, plus the overall current state of the economy.

"This is truly the golden age of agriculture," Catlett said, providing a blend of humor and futuristic outlook to his keynote.

He touted the agriculture industry and rising agriculture real estate values.

"They've gone up threefold over the last 10 years," he said. "Agriculture has some of the strongest financial statements of any in the industry. What do you think the outlook for beef is?"

Catlett said there's a lot ahead for beef producers in the future, especially with regard to consumers who are of the millennial age. Many carry smartphones and don't know how to cook, he said. Holding a smartphone, he referenced the late Steve Jobs and Apple Inc.'s iPhone with apps. He said consumers like himself may walk up to a meat case, point the phone and take a picture of a retail cut of meat. An app would then respond with a celebrity chef offering cooking advice.

"Go write some apps," he said. "This (smartphone) is the most phenomenally integrated system on the planet."

This year's beef cattle short course was dedicated to Dr. L. R. Sprott, professor and AgriLife Extension beef cattle specialist emeritus. Sprott served as Upper Gulf Coast beef cattle specialist from 1981 until his retirement in August 2003. His interest specialized in commercial cow-calf production and his research publications focused on specific reproduction improvement methods.

The beef short course event showcases the latest research and educational programs offered by AgriLife Extension, Texas AgriLife Research and the department of animal science at Texas A&M and included 70 different speakers from these organizations as well as the College of Veterinary Medicine. In addition, beef industry leaders spoke at 23 different Cattleman's College sessions. For the second year, a youth program was held and attracted 22 Texas junior high and high school students.

The annual event is one of the largest beef-education workshops in the country. Next year's short course is scheduled for Aug. 5-7, 2013.

For more information about the short course, visit the event blog at <http://agrilife.org/beefshortcourse/> and Twitter posts at #beef-CSC12.

# Grass-fed beef conference attendees seek management, expansion ideas

By Blair Fannin  
*AgriLife Communications*

COLLEGE STATION – One by one, they had questions and lots of them. A roomful of grass-fed beef producers came to Texas A&M University in College Station recently to learn more about an emerging aspect of beef production that continues to steadily gain momentum.

“It’s not going to take over the entire beef industry, but grass-fed beef production is certainly catering to consumers who are wanting meat products directly from the farm,” said Dr. Rick Machen, Texas AgriLife Extension Service beef cattle specialist from Uvalde and professor in the Department of Animal Science. “There’s an ever-growing segment of consumers interested in natural products, organic products and grass-fed products. Our primary focus here is to outline how we produce grass-fed beef.”

The conference, the second of its kind conducted by AgriLife Extension, drew more than 50 participants, and feedback indicated strong desire for another workshop next year, Machen said.

“This is a growing aspect of the beef cattle market and producers are wanting more information about how to get into this business and be profitable,” Machen said.

Grass-fed beef has at least three definitions, but essentially it is meat from cattle that have been fed from birth to harvest on grass, legumes and forages without the use of any grains.

Mac Young, AgriLife Extension economist, said beef producers traditionally have marketing options such as a sale barn, private treaty or value-added.

“Grass-fed is value-added,” he told attendees. “Direct sales to consumers, suppliers or both? You need to identify your goal and above all, you’ve got to have a plan.”

Young said it is important for grass-fed producers to plan out what they are trying to do with their operation and what they want to accomplish.

“Any new venture is risky, and any change to your existing operation is risky,” he said.

Young said producers should consider if they have enough capital to enter or expand into the grass-fed business. Sustainability and profitability are other important issues to consider.

“You need to project out and see if you are going to have enough to cover all of your costs,” he said. “Review the resources you have with regards to capital, labor, herd numbers and forage.

You need to also ask will you have enough volume to cover your expenses?”

Gene Sollock from Iola has been in the grass-fed beef business for 15 years. His operation consists of 91 acres, and he sells his grass-fed cattle to a buyer from Burton, who “has them sold over the telephone before they are finished out.”

“We are growing them out to about 800 to 900 pounds,” said Sollock, who receives payment based on dressed, hanging weight.

Sollock said he uses no commercial fertilizer and grazes the cattle on ball clover established 20 years ago.

“We have 40 different paddocks that are about 2 acres in size,” he said. “We move those cattle into knee-deep forage where they graze about two days. But you’ve got to have rain.”

Mark Muncer, a grass-fed beef producer from South Africa, said his operation finishes cattle at about 990 pounds, with dressed carcass weight at approximately 550 pounds.

Since there is not an established market for grass-fed beef, there are premiums for grass-fed beef on top of the

already historically high cattle prices, according to the producer panel.

Charlie Bradbury, chief executive officer of Nolan Ryan’s Beef, told attendees the company has just begun marketing a grass-fed line of beef.

“We don’t own any cattle,” Bradbury said. “We buy beef from producers that meets our specifications, then brand it and sell it.”

Bradbury said consumers want to know where their food, including beef, comes from, how it is raised and what it has been fed. Currently, the company is processing approximately 48 head a week in Nebraska, then shipping to a plant in Dallas where primal cuts are made and packaged with the Nolan Ryan brand.

Ground beef, rib-eye steaks, tenderloin filets and chuck roasts are the main cuts marketed by Kroger. The beef is marketed in about 80 stores and demand has been steady, Bradbury said.

He said Kroger eventually would like to have the grass-fed line of beef in all of its stores, but “our biggest problem is supply.”

That encouraged attendees who were looking to go back home with new ideas to implement into their operations, they said.

Also presenting from the Department of Animal Science were Dr. Ron Gill, Dr. Rick Machen, Dr. Steve Hammach, Dr. Joe Paschal, Dr. Tryon Wickersham, Dr. Tom Hairgrove, Dr. Davey Grifin and Dr. Chris Kerth.





FORMER STUDENT

## BRANDI BOURG KARISCH

*“The reach of the Aggie network amazes me, especially in the beef industry. When I attend industry and academic meetings, I often meet fellow Aggies and make an instant connection.”*



Dr. Brandi Bourg Karisch finished her college education with a doctorate in animal science from Texas A&M, but she did not leave academia. Brandi started her career at Mississippi State University as an Assistant Professor and Beef Cattle Specialist in the Department of Animal and Dairy Sciences. In this position, Brandi is responsible for beef cattle programs related to growing cattle including stocker cattle, heifer development and finishing cattle. She travels the state giving educational talks at county cattlemen's meetings, field days and workshops. This year she will organize the 2012 Deep South Stocker Conference, a joint program between Mississippi, Alabama and Georgia. In addition to her extension work, Brandi runs applied research projects in the areas that directly impact beef producers in Mississippi and the Southeast. This fall she will begin teaching an undergraduate course on livestock evaluation.



Brandi graduated from Louisiana State University with a bachelor's in animal science in 2005 and then moved to Texas to complete a master's degree in animal science in 2007 and her doctorate in 2011. While at Texas A&M, Brandi received the Tom Slick Fellowship her last semester and was selected as a recipient of the International Stockman's Education Fund Fellowship in 2011 to attend the 2011 International Livestock Congress in Denver. She was involved in the Animal Science Graduate Student Organization and represented the department with the departmental booth at the NCBA and TSCRA tradeshow. In fact, it was at her last NCBA convention as a student where she met a Mississippi beef producer who told her about the job opening for the position that she now calls her own.

Here's what Brandi has to say about being an Aggie:

*Why did you choose to attend Texas A&M to complete your graduate work?*

As I searched for a graduate program with a focus in beef cattle nutrition, I was instantly drawn to the reputation of the animal science department at Texas A&M. As a member of the 2004 Livestock

Judging Team at LSU, I spent a lot of time hearing the names of that year's Texas A&M Livestock Judging Team called at contests, and I met and visited with the team and coaches after several contests. After a visit to College Station and a tour of the department and research facilities, I knew I didn't want to be anywhere else.

*Do you feel your advanced degrees in Animal Science and your time at Texas A&M helped you get to where you are today?*

I definitely believe that my degrees and time at Texas A&M got me to where I am today. The reach of the Aggie network amazes me, especially in the beef industry. When I attend industry and academic meetings, I often meet fellow Aggies and make an instant connection and reminisce about our time spent in the halls at Kleberg. I have also had the opportunity to work with numerous fellow graduate students who have gone on to become leaders in academia and industry.

*Is there anything or anyone specific in Animal Science that influenced your career?*

Numerous people have made a big impact on my career and my life -- Dr. Luis Tedeschi, my major professor, Drs. Tyron Wickersham, Gordon Carstens, Russell Cross, Andy Herring, Jim Sanders, Jason Sawyer. All of these men have been great mentors and examples. I can't imagine the amount of time I spent in each of their offices asking questions about research, statistics or just having a good debate about cattle. I truly believe I wouldn't be where I am today without their help and guidance, and without the help of the great staff of the Department of Animal Science.

*If you could offer advice to a prospective student interested in getting an advanced degree in Animal Science at TAMU, what would you tell them?*

Don't forget to make connections and enjoy your time as a graduate student. As a graduate student, many become focused only on their research and classwork and forget the bigger picture. Be involved. Make friends. It's the best way to make it out of graduate school alive! During my time as a graduate student, I was fortunate to meet numerous people whose connections I find myself constantly calling on in my current job. I was also fortunate to meet my husband, who is also a graduate of the Department of Animal Science, and some of my best friends.

# Student INTERNSHIPS

Students in the Department of Animal Science receive scientific training and hands-on experience that prepares them for a career in animal science. An important part of this well-rounded education is the placement of animal science students in internships with top businesses in animal production and related industries. Through these internships, students receive real-life experience, apply what they've learned in the classroom, build leadership, character and life skills, and take the first step in starting a rewarding career in animal agriculture and business.



**LINDSEY ROETZEL**

Royal Vista Southwest  
Purcell, Oklahoma

Lindsey spent six months of 2012 working as a foaling attendant/intern for Royal Vista Southwest. A senior animal science major from Haslet, Texas, Lindsey plans to graduate in May 2013 and pursue a career in equine reproduction management. While at Royal Vista Southwest, Lindsey assisted veterinarians with daily care including distributing medications and treatments, setting up for procedures such as embryo retrieval and artificial insemination, and assisting in actual embryo recovery and transfer of embryos into recipients. She provided general overnight care such as watering, feeding and cleaning stalls and assisted in foaling out the mares.

★ **What have you learned from this internship?**

I have learned a lot more about the reproductive cycle of equine. I had also never worked with foals so that was a new experience in itself.

★ **What did you enjoy about the internship?**

I had a blast at Royal Vista Southwest. It was intense and demands only the most dedicated of interns, but it was extremely rewarding and you're working with the best. When you leave, you have a great base to build on for a future career in almost anything equine.

★ **Has your TAMU animal science education prepared you for this internship?**

The ANSC 433 (reproduction) class was absolutely beneficial as it gave me a base to work from. I believe this class was essential to giving me a background in general anatomy of breeding animals and how they function reproductively. It was a great class and the book is really helpful.

Katie is a senior animal science major from Fredericksburg, Texas and plans to graduate in December. This summer, Katie worked as a companion animal health sales intern for Elanco. The main focus of her internship was on the company's marketing materials, which led her to working with clients in Bryan, College Station, Houston, Katy, Missouri City, Galveston and Sugar Land. Each day was different but overall her time was spent visiting various accounts within her territory, delivering merchandising materials as well as products, meeting and shadowing various employees, and training at Elanco's home office in Greenfield, Indiana.

★ **What have you learned this summer?**

Elanco teaches interns consultive selling skills. It was nice to have the schedule of a rep as I was able to plan my own routine to make my days most efficient. Elanco is a great company to work for and I strongly suggest students hoping to pursue a career in animal health pharmaceutical sales to look into this great opportunity. This has been once-in-a-lifetime experience and I will always be grateful for their investment in the intern program.

★ **Do you feel this internship will help you in the future?**

Yes! With my goal to pursue a career in sales and marketing within animal health pharmaceutical sales, I couldn't have asked for a better opportunity than this.



**KATIE FRITZ**

Elanco  
Houston and College Station  
(photo taken in Greenfield, Indiana)



Alyssa is from Scurry, Texas, and graduated from Texas A&M in May 2012 with a bachelor's degree in animal science. She returned to A&M in August to start a master's program in ruminant nutrition. This summer, Alyssa interned in Washington, D.C. through the Agricultural and Natural Resources Policy Internship Program. Her main responsibilities included general administrative duties and attending briefings and meetings.

**★ What did you learn while in D.C.?**

The most interesting thing was seeing how legislation passed on a daily basis. I loved knowing what was happening next door in the Capitol as it happened. I enjoyed seeing public policy processes and how lawmaking and amending actually happens.

**★ What experience was most beneficial to you?**

D.C. is an amazing place in that people come here from everywhere, both from within the U.S. and from all over the world. It's literally a "melting pot" of a city, so it was quite the learning curve being around people who were coming at things with a different perspective. Learning to work with different people is an important part of any career.

**★ Did your animal science education prepare you for this internship?**

Yes, I love that I have a technical education and can use that to think and act quickly in D.C.'s fast-paced work environment. Critical thinking skills, something I believe the animal science department helped develop in me, are definitely an important part of my job here.



**ALYSSA WORD**

Office of Congressman  
Ruben Hinojosa  
Washington, D.C.



**KATIE MUEHLSTEIN**

House Committee on  
Agriculture  
Washington, D.C.

Katie is a senior animal science major from Kerrville. Her love for agriculture and a previous trip to D.C. for the National 4-H Convention motivated her to apply for the Agricultural and Natural Resources Policy Internship Program. This summer, Katie worked on special projects for committee staffers, performed general administrative tasks and attended briefings and hearings.

**★ What have you learned while in D.C.?**

Working on Capitol Hill is a really exciting experience. Each day presents itself with new opportunities to network and to soak in all that's happening on the hill. I've had the opportunity to listen in on briefings regarding the Farm Bill and my office encouraged us to attend briefings, hearings and receptions held on Capitol Hill.

**★ Did your animal science education prepare you for this internship?**

My animal science education was key to helping me be qualified for this internship because of issues covered by the House Agriculture Committee's staffers deal with livestock, meat, nutrition and many other related topics covered in our degree plan. The most important skill to have in order to truly excel at this job is to be able to be a people person. Communication is the key.

**★ Will this internship help you obtain your career goals?**

Following graduation, I plan to pursue a doctoral degree in physical therapy. Even though physical therapy is not directly related to policy or agriculture, the ability to adapt easily to the various tasks involved with my job and the connections I've made will help me obtain my career goals. I encourage anyone with the slightest interest in agriculture or political science to consider applying to inter with the ANRP program; you won't regret your decision.

**SUSAN SEXTON**

Cargill Meat Solutions  
Plainview, Texas

Susan is a senior animal science major from La Porte, Texas. She spent the summer working at Cargill Meat Solutions as an operations intern on the kill floor and was in charge of creating a standard for daily offal yields and was also tasked to improve offal yields for fat cattle. In addition she helped the supervisors set up their areas and keep the line running smoothly.

**★ What have you learned as an intern with Cargill?**

I have learned about the different factors that influence yields, the plant's HACCP plan and have worked with the USDA to ensure food safety and product specifications. I have truly enjoyed my internship. The people at the plant, both production workers and upper management, have been very helpful in my training and learning. I couldn't have asked for a better experience.

**★ Did your animal science education prepare you for this internship?**

Texas A&M animal science has definitely helped me with my internship by teaching me in ANSC 307 the processes and different regulations that need to be followed. Dr. Jeff Savell's 307 class gave me a leg up on some of the other interns because I already had an understanding of what was going on and why.

## Texas A&M students win National Academic Quadrathlon

Phoenix, AZ -- After a rapid-fire quiz bowl round against Penn State, a team of four animal science students from Texas A&M University won first place in the 2012 National Academic Quadrathlon. The TAMU team was made up of Brent Hale, Jacob Brown, Catherine Moore and Dillon Garr.

The event was held July 13-16 at the Joint Annual Meeting of the American Society of Animal Science and was the first of its kind.

"We're proud of these guys," said Russell Cross, professor and head of animal science at Texas A&M University.

To get to the national competition in Phoenix, teams had to compete at the local and regional levels. An estimated 41 teams competed at the local level this year. Each quadrathlon consists of a written exam, oral presentation, lab practicum and quiz bowl. To win, undergraduate students answer questions and demonstrate skills in animal science, veterinary medicine and animal production.

"You have to rely on each other's expertise," said Brown.

Moore said one highlight of the competition came during the lab practicum, when the team had to identify samples of animal feed ingredients. Instead of just looking at the ingredients, Moore decided to taste them herself—and it paid off.

"I thought it was molasses, and I tasted it. Yep, molasses!" Moore said.

Winning the competition was not without challenges for the TAMU team. All the team members have just completed sophomore year of college, which made them the youngest team in competition. Dillion said the hardest part of the Quadrathlon was the quiz bowl. Students in the quiz bowl used buzzers to ring in and answer timed questions.



Photo courtesy of the American Society of Animal Science.

Left, Dr. Russell Cross, Jacob Brown, Dillon Garr, Catherine Moore, Brent Hale and Dr. David Forrest.

David Forrest, professor and associate head for Academic Programs in the Department of Animal Science at TAMU and advisor to the team, said it was great to see students demonstrate what they had learned.

"I'd encourage every school to enter their local contest," Forrest said.

The 2012 National Academic Quadrathlon was sponsored by the American Society of Animal Science, the ASAS Foundation, CEV Multimedia, Select Sires and Block and Bridle. The University of Arizona hosted the lab practicum and written exam.

## Randel receives L.E. Casida Award

PHOENIX, ARIZ. -- Dr. Ronald Randel, professor at the Texas A&M AgriLife Research and Extension Center at Overton, received the American Society of Animal Science L.E. Casida Award for his research in animal reproductive physiology. Randel was honored at the society's annual meeting in Phoenix, Ariz., July 16, 2012.

Randel, an AgriLife Research Senior Faculty Fellow in the Department of Animal Science, is known for training graduate students in the fields of animal reproduction and endocrinology. Randel, nicknamed "Doc" by many, has worked with graduate students to discover ovarian and pituitary functions in Brahman cattle. He and his students published a comprehensive compendium of papers comparing the physiology and endocrinology of Brahman and European cattle.

Randel and his students have also researched the effects of nutrition on reproductive physiology. By manipulating the concentration of ruminal volatile fatty acids and the flow of nutrients into the small intestine, Randel and his students found they could alter the re-

productive development and function of heifers, mature cows and bulls. His investigations and explanations of the fundamental interaction of nutrition and reproduction led, in part, to FDA approval of ionophores (rumen altering antibiotics) for use in beef cattle nutritional and reproductive management.

In studies of the reproductive physiology of the lactating beef cow, Randel and his students demonstrated that young cows could be suckled on a limited basis, allowing them to "escape" from lactational anestrus. Young cows could then be bred and the calf could resume normal suckling. This discovery led to more calves being born in the dairy industry.

The American Society of Animal Science L. E. Casida Award is given to recognize excellence in the education of graduate and/or postdoctoral students to conduct research in the area of reproductive physiology and endocrinology. The American Society of Animal Science is a professional organization that serves more than 5,000 animal scientists and producers around the world.



Right, Dr. Ronald Randel was honored with the L.E. Casida Award in recognition of his excellence in educating graduate and post-doctoral students in reproductive physiology and endocrinology. He's pictured with Dr. Tom Welsh, professor of physiology of reproduction in the Department of Animal Science.

## AMSA honors Harris with distinguished service award

CHAMPAIGN, IL -- The American Meat Science Association (AMSA) honored Dr. Kerri Harris, associate professor in the meat science section of the Department of Animal Science and president/CEO of the International HACCP Alliance, as the recipient of the 2012 Distinguished Extension-Industry Service Award.

Harris was recognized at a special reception and awards presentation at the AMSA 65th Reciprocal Meat Conference on June 19, 2012 in Fargo, ND.

The award was established in 1965 to recognize outstanding achievement in meat science extension and service to the industry and is sponsored by the American Meat Institute Foundation.

Harris has been actively involved with the HACCP Alliance since it was formed in March 1994, and has contributed to its growth and accomplishments. She helped the Alliance standardize HACCP training programs and assisted with the development of the train-the-trainer course and the accreditation program for HACCP training providers. Harris authored the Alliance's proposal to develop ten generic HACCP models for USDA and received the grant allowing her to lead this valuable effort.

She has been awarded four competitive grants to conduct USDA's Food Safety and Inspection Service's Enforcement Investigation and Analysis Officer



Right, Dr. Kerri Harris receives the 2012 Distinguished Extension-Industry Service Award from Dr. James H. Hodges, executive vice president, American Meat Institute.

(EIAOs) training. Since October 2001, 30 Extension credit EIAO courses have been conducted as part of these multi-year grants.

Harris facilitated the development of Best Practices for Beef Harvest, Industry Best Practices for Holding Tested Product, Best Practices for Microbiological Sampling, and Best Practices for Retailer Operations Producing Raw Ground Beef. She works closely with the industry and provides valuable assistance with HACCP implementation. Harris assists establishments by providing hands-on

assistance to help develop and implement scientifically sound food safety programs that comply with regulatory requirements. Her efforts and dedication to food safety are well recognized on a national and international basis.

In addition to her outreach efforts, Kerri is responsible for developing a research program and teaching a HACCP course for graduate/undergraduate students and a graduate course on food safety policy and regulations. Prior to her position with the International HACCP Alliance, Harris taught seven different human nutrition courses and served as the director of the Combined Graduate Degree - Dietetic Internship Program.

Harris is a three-time graduate of Texas A&M University. She received her bachelor's in food science in 1986, master's in nutrition in 1989, and doctorate in nutrition in 1994. Harris has published multiple refereed journal articles and other publications, co-authored three book chapters, and presented at multiple national and international meetings.

Harris was nominated by Dr. Jeff Savell, Texas A&M University, who stated that "Because of her extension and industry activities and her commitment and dedication to our industry, Dr. Kerri Harris is most deserving of the AMSA Distinguished Extension-Industry Service Award."

## New Equine Certificate available for Texas A&M students

COLLEGE STATION – The Department of Animal Science has established a new Equine Certificate that lays out a curriculum designed for students with a strong interest in equine science and industry.

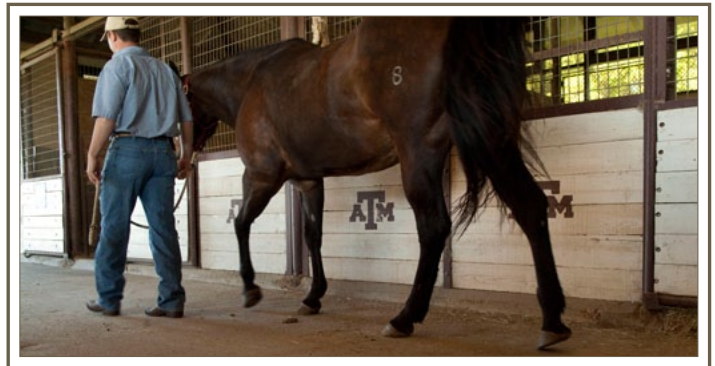
Beginning this fall, students of any major can complete 22 credits in select equine courses and receive the equine certificate in addition to their bachelor's degree.

"The equine certificate provides a structured curriculum for students with a strong interest in equine science, said Dr. David Forrest, associate head for academic programs.

"The equine industry offers significant employment opportunities for qualified graduates. Texas leads the nation with more than 1 million horses and over 500,000 people involved in the diverse components of the horse industry. The requirement to complete an equine internship will enhance the experiential learning of students to prepare them for a successful career."

The coursework includes many existing courses as well as three new equine courses: equine industry and career preparation, equine disease and epidemiology, and issues in the equine industry. Upon completion, students will have knowledge in equine nutrition, reproduction, disease, handling, management, career preparation and industry issues.

"Students have the opportunity to learn from equine



expert faculty here at Texas A&M and use the facilities and animals already available. Now they will get recognition for a strong, solid equine education, which can potentially enhance their career opportunities and increase their exposure as being part of the equine science program at Texas A&M," said Dr. Martha Vogelsang, senior lecturer in the Department of Animal Science.

For more information on seeking an equine certificate, contact the Department of Animal Science advising office at (979) 845-7616.

## National association to advocate for animal research funding

COLLEGE STATION – A group of university department heads from across the nation have come together to establish an association focused on advocating increased federal investment in animal science.

The National Association for the Advancement of Animal Science is comprised of representatives from animal, dairy and poultry science departments from colleges and universities across the U.S. who are dedicated to improving overall federal funding for animal agricultural research.

Dr. Russell Cross, head of the department of animal science at Texas A&M University, serves as president of the association.

"Federal funding for research, education and extension in the animal sciences has remained stagnant over the last 30 years, both in terms of real dollars invested and as a percentage of the U.S. Department of Agriculture's overall investment in science," Cross said.

"While there have been numerous efforts to address overall funding for agricultural research, there has not been a concerted effort to specifically advocate for funding of the animal sciences. In order to address funding inequities and build support for increasing the federal investment in the animal sciences, bold new steps need to be taken."

The association will serve as a common voice for animal agricultural researchers who play a critical role in maintaining the nation's status as a world leader in safe, abundant and efficiently produced animal products, according to officials. It intends to work closely with like-minded groups such as the Federation of Animal Science Societies, the Animal Agriculture Coalition to complement their activities by providing focused advocacy to increase funding for the animal sciences.

The association will actively work with Congress and the Administration to promote the importance of investing in animal science. Its members will benefit from regular updates on policy developments and be alerted to opportunities to communicate with policy makers, he said.

As the world's population grows and natural resources become limited, agricultural research is necessary to improve efficiency in order to sustain food supplies for the growing global community.

"Demand for agricultural products is expected to increase 70 to 100 percent by 2050," Cross said. "As global economies

develop, the demand for animal products is projected to grow most rapidly. Funding support at the federal level is a must in order for our nation's top researchers to continue making discoveries and advancements in agricultural research in order to increase agricultural productivity and meet this projected growth."

All departments of animal, dairy and poultry science in the U.S. are encouraged to join the association. National, regional and state commodity, industry and other organizations allied with animal agriculture are also encouraged to become associate members.

For more information on the association or to join, contact Cross at [hrcross@tamu.edu](mailto:hrcross@tamu.edu), Walt

Smith at [wsmith@lockelord.com](mailto:wsmith@lockelord.com) or Lowell Randel at [Lowell@therandelgroup.com](mailto:Lowell@therandelgroup.com).



### The Advancement of Animal Science

#### NAAAS Officers:

- Russell Cross, president – head of department of animal science, Texas A&M University;
- Maynard Hogberg, vice president – chair of department of animal science, Iowa State University;
- Kevin Pond, secretary – head of department of animal sciences, Colorado State University; and
- Janice Swanson, treasurer – chair of the department of animal science, Michigan State University.

#### NAAAS Directors:

- Ron Allen, associate dean for research and director of the agricultural experiment station, College of Agriculture and Life Sciences, University of Arizona;
- Larry Berger, head of department of animal science, University of Nebraska-Lincoln;
- John Carey, head of department of poultry science, Texas A&M University;
- Wayne Greene, head of department of animal science, Auburn University;
- Gerald Horn, head of department of animal science, Oklahoma State University;
- Ronald Kensinger, chair of department of animal sciences, Ohio State University;
- Mike Lacy, head of department of poultry science, University of Georgia; and
- Ken Odde, head of department of animal sciences and industry, Kansas State University.



## Congratulations animal science graduates

The Department of Animal Science congratulates our August 2011 graduates! Earning doctoral degrees in animal science were Amber Adams and Aimee Hafla; and Malcolm Delvovio, Jr., earned a doctoral degree in physiology of reproduction. Receiving a master of agriculture in animal science was Robert Miles; master of science in animal science were Mark Carter, Jr., Andrea Hanson and Jennifer Rosenberg. Forty students received bachelor of science degrees in animal science. We wish you all much success in your future careers and educational pursuits.

## Poe joins department as lecturer, judging team coordinator

COLLEGE STATION -- Brant Poe joined the Department of Animal Science on Aug. 15 as a lecturer and will transition into coordinating the Texas A&M Livestock Judging Team in 2013.

Poe will be responsible for teaching livestock evaluation, general animal science and meat evaluation, and will begin working with members of the junior livestock judging team this fall in preparation for the start of the 2013 spring competition season. Poe will work in cooperation with Jake Franke, who has served as livestock judging team coordinator since 2009 and will continue to coordinate the 2012 senior livestock judging team this fall with the assistance of Jake Thorne as coach.

Franke will graduate from Texas A&M with a doctorate in animal science this December and has accepted a position with XF Enterprises as a manager of the supply chain management program in Amarillo.

"The Texas A&M Livestock Judging Team is one of the strongest in the country and for this we can thank the talented leadership. We are excited to bring Brant Poe on board. His proven record of success at Blinn College along with his experience in livestock judging at Texas A&M makes him highly qualified to lead our program and continue the tradition of excellence," said Dr. Russell Cross, head of animal science.

"Also, Jake has provided the team with outstanding leadership and knowledge. Under his direction, the team has won numerous national competitions and has continued to set

the standard for livestock judging across the country. We are proud of what he's done for our livestock judging program and what he's accomplished academically. We only wish the best for Jake as he enters the next step in his career," Cross said.

Since 2002, Poe has worked at Blinn Junior College in Brenham as an animal science instructor and as coach and coordinator of the livestock judging team. As an instructor, he taught introduction to animal science and livestock evaluation courses. Poe led the livestock judging team to numerous championship finishes at national competitions including the Houston Livestock Show and Rodeo, San Antonio Livestock Exposition, the National Western Stock Show and the Southwestern Exposition.

In 2009 and 2011, Poe was named Junior College Coach of the Year by the National Junior College Coaches Association.

A two-time graduate of Texas A&M University, Poe received a bachelor's degree in animal science in 2000 and a master of education in agriculture education in 2003.

As an undergraduate student, Poe was a member of the 1999 National Champion Intercollegiate Livestock Judging Team. That same year, he finished in the top ten at eight intercollegiate national contests.

The 2012 Senior Livestock Judging Team began practice in mid-August in preparation for their first two contests, the Flint Hills Classic on Sept. 21 and the Mid-American Classic on Sept. 22.



BRANT POE

## Students gain real-world dairy experience in New Mexico

CLOVIS, NEW MEXICO -- Fifteen Texas A&M University students from the College of Agriculture and Life Sciences spent six weeks in Clovis, New Mexico, this summer participating in the 5th annual Southern Great Plains Dairy Consortium Teaching Program.

The SGPDCCT program was held May 14 - June 23 and brought together a total of 42 students from Texas A&M University, Tarleton State University, Texas Tech University, New Mexico State University, Eastern New Mexico University, University of Arizona, University of Florida, University of Idaho, University of Missouri, Colorado State University, Washington State University, Delaware Valley College and Stevens Institute of Technology for an intensive hands-on dairy training program.

Participating from Texas A&M were animal science students Courtney Hemphill, Sarah Manning, Bethany Weinheimer, Byman Ballard, Anna Haines, Ika Dmestra, Carina Cedillo, Brittany Dean and Jonathan Holub; biomedical science students Edward Vasquez and Chantel Reinertsen; agribusiness students Adam TeVelde and Blake Wolf; agribusiness and ag economics student David Volleman and first year vet student Sara Genzer.

Topics covered include herd evaluation, reproduction, nutrition, genetics, facilities and mastitis as it related to larger herd management. Nationally-known faculty members from top-rated universities and industry experts were brought in to teach the different courses which include classroom lectures followed by hands-on work at area dairies, laboratories and other field trips.

"This program is unique in that it ties classroom lectures with practical real world experience by using the numerous local dairy herds," said Dr. Michael Tomaszewski, visiting professor and professor emeritus in the Department of Animal Science and chair of the SGPDCCT steering committee.

The SGPDCCT was created to specifically address the need to improve the availability of dairy science education at universities in the Southwest and to ensure the growing dairy industry a well-qualified pool of prospective employees for future employment, according to a program brochure.

For more information about this program, go to <http://sgpdct.tamu.edu>.



Front, left, Texas A&M students Edward Vasquez, Courtney Hemphill, Chantel Reinertsen, Sara Genzer, Sarah Manning, Bethany Weinheimer and Adam TeVelde. Back, left, Blake Wolf, Byman Ballard, David Volleman, Anna Haines, Ika Dmestra, Carina Cedillo and Jonathan Hobub. Not pictured is Brittany Dean.

## Summer program engages students in undergraduate research

Animal science student Michelle Gutierrez had not conducted research prior to this summer, but now thanks to an undergraduate research program at Texas A&M University she knows the proper technique of staining tissues, extracting RNA and extracting testosterone from testicular tissue.

Gutierrez, a senior from McAllen, was one of five undergraduate students who participated in an Honors and Undergraduate Research program called Summer Program in Undergraduate Research (SPUR), a program titled, "Integrated Physiology: a Tool to Enhance Undergraduate Research Experience in Animal Science." Also participating were Darryl Yates, animal science; and Vanessa Maher, Mary Terrill and Jason Jucker, biomedical sciences.

The students conducted research under the direction of three Department of Animal Science faculty members: Dr. Marcel Amstalden, associate professor; Dr. Thomas Welsh, professor; and Dr. Nancy Ing, associate professor.

"This research program stimulated critical thinking in our students, as well as trained them in research so they can continue in undergraduate research after our program," said Amstalden. "We also wanted this project to show the students the integration between cellular and whole-animal functions, through the learning of fundamental biological concepts for a better understanding of animal physiology."

The students worked in teams of two and were assigned

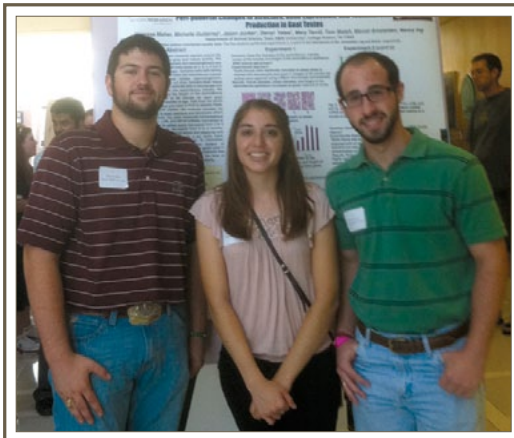
to investigate tissue growth, gene expressions, and testosterone production during maturation of the goat testis. Each team evaluated the age-related changes in testis structure and function at cellular and molecular levels, using traditional and state-of-the-art methods available in the laboratories.

Working with the faculty and graduate students, the undergraduate histomorphologically evaluated endocrine glands, analyzed expression of key genes involved in sperm and steroid production, and measured testosterone production.

Gutierrez expects this experience will help her if she chooses to apply to veterinary school or graduate school.

"This experience reinforced what I already learned in some of the animal science courses such as ANSC 433 and GENE 301. Overall, this was a really interesting experience and I'm glad to have had the opportunity to do research. I recommend other fellow Aggies take a chance and explore their interests while keeping an open mind," Gutierrez said.

Upon completion of the program, the students prepared a report to share their results with the Integrative Physiology SPUR group and engaged in coordinated discussions designed to integrate results obtained by all teams. Students also participated with more than 100 other students in the campus-wide Research Experience for Undergraduates summer activities sponsored by HUR, including a public research poster session on July 31.



Left, Students Darryl Yates, Vanessa Maher and Jason Jucker presented their research information at the Research Experiences for Undergraduates research poster session.

## Texas Beef Quality Producer training educates Puerto Rico ranchers



PUERTO RICO -- Dr. Jason Cleere, associate professor in the Department of Animal Science and Texas AgriLife Extension beef specialist, and Dr. Ron Gill, professor and Extension livestock specialist, conducted a Texas Beef Quality Producer (TBQP) training for ranchers in Puerto Rico on June 4-5, 2012. The TBQP promotes good management practices for cattle producers in an effort to strengthen consumer confidence in beef as a wholesome food product and focuses mainly on beef safety and beef quality.

The event was organized by the Puerto Rico Department of Agriculture and attracted 50 ranchers from across the island. The two-day training included classroom instruction held in Cabo Rojo and cattle demonstrations held at Altamire Ranch, which is owned by Dr. Vanessa Sanches who has attended the Texas A&M Beef Cattle Short Course for more than 15 years. Cleere and Gill conducted demonstrations on proper cattle processing, low stress cattle handling and cattle selection.

Cleere and Gill also toured the University of Puerto Rico Agricultural Research Center on the west side of the island. The center conducts research utilizing Senepol and Charbray cattle.

## Faculty, graduate students present at summer scientific meetings



This summer, several Department of Animal Science faculty and students attended and participated in annual meetings of scientific organizations. A list of meetings and abstracts presented include:

### ■ June 17-20, 2012 - Reciprocal Meat Conference, Fargo, North Dakota

Harbison, A., C. Kerth, S. Smith, and R. Miller. 2012. Improving the flavor of ground beef by selecting trimmings from specific carcass locations. Page 62 in Proc. Recip. Meat Conf., Fargo, North Dakota.

McKeith, R. O., G. D. Gray, D. S. Hale, C. R. Kerth, D. B. Griffin, J. W. Savell, K. E. Belk, D. R. Woerner, J. D. Tatum, J. L. Igo, D. L. VanOverbeke, G. G. Mafi, T. E. Lawrence, R. J. Delmore, L. M. Christensen, S. D. Shackelford, D. A. King, and T. L. Wheeler. 2012. National Beef Quality Audit – 2011: Survey of producer- and packer-related defects on the harvest floor. Page 73 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Martin, J. N., A. M. Luna, L. L. May, A. N. Haneklaus, K. B. Harris, J. L. Schutz, K. E. Belk, D. R. Woerner, L. W. Douglass, J. L. Leheska, J. M. Holden, K. Y. Patterson, M. Duvall, J. Howe, and L. D. Thompson. 2012. Development of nutrient labels for four retail cuts from the beef rib. Page 54 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Grayson, A. L., R. K. Miller, and G. E. Carstens. 2012. Loadcell effect on Warner-Bratzler shear force values of beef steaks. Pages 73-74 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Orozco-Hernandez, P., R. K. Miller, A. L. Grayson, S. M. Parketon, S. B. Smith, and G. E. Carstens. 2012. Relationships between beef post-harvest biochemical factors and Warner-Bratzler shear force. Page 75 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Ulbrich, C. J., K. B. Harris, T. M. Taylor, and J. W. Savell. 2012. Methods for controlling *Escherichia coli* O157:H7 and *Salmonella* surrogates during the production of non-intact beef products. Page 78 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Igo, J. L., D. L. Vanoverbeke, G. G. Mafi, D. S. Hale, J. W. Savell, D. L. Pendell, D. R. Woerner, J. D. Tatum, and K. E. Belk. 2012. Driving change: The 2011 National Beef Quality Audit. Page 80 in Proc. Recip. Meat Conf., Fargo, North Dakota.

### ■ June 23-26 - Annual Meeting of the Endocrine Society, Houston, Texas

Jennifer Thorson, Ligia Prezotto, Alain Caraty, Marcel Amstalden, Gary Williams. 2012. RF9, a Potent Antagonist of RFRP3 Receptor Signaling, Disinhibits Secretion of LH in the Seasonally Anovulatory Mare. *Endocrine Reviews Supplement* 33(3).

### ■ July 15-19, 2012 - American Society of Animal Science and American Dairy Science Association, Phoenix, Arizona

Department of Animal Science faculty and graduate students (pictured above) attended the 2012 Joint Annual Meeting of the American Society for Animal Science (ASAS) and the American Dairy Science Association (ADSA). This included, *front, left*, Ashley Navarette, Courtney Stefan, Dr. Ellen Jordan, Ashley Vanderlick, Catherine Moore, Jessica Lucia, Kelly Winsco, Dr. Penny Riggs, Dr. Tom Welsh, Dr. Josie Coverdale, Amber Adams, Merritt Drewery, Sara Schmidt, Andrea Hansen, Amy Hafra and Debbi Price. *Back, left*, Dr. Ralph Bruno, Kevin Lager, Dr. David Forrest, Brent Hale, Dillon Garr, Jacob Brown, Chase Runyan, Erika Downey, Dr. Andy Herring, Xin "George" Fang, Dr. Tryon Wickersham, Dr. Travis Whitney and Dr. Luis Tedeschi. For a complete list of presentations made at this meeting go to <http://animalscience.tamu.edu/2012/08/22/ansc-faculty-students-present-at-annual-animal-dairy-sciences-meeting/>.

### ■ Aug. 12-16, 2012 - Society for the Study of Reproduction Meeting, State College, Pennsylvania

Alves BRC, Cardoso RC, Tedeschi LO, Caraty, A, Williams GL, Amstalden M. 2012. Accelerated body weight gain during the juvenile period alters the neuropeptide Y-kisspeptin circuitry in the hypothalamus of prepubertal heifers. Abstract 155.

Jennifer Thorson, Sarah Sharpton, Ligia Prezotto, Rodolfo Cardoso, Penny Riggs, John Edwards, Marcel Amstalden, Gary Williams. 2012. Expression of Hypothalamic RF-amide Related Peptide 3 (RFRP3) and Adenohypophyseal G Protein-coupled Receptor 147 (GPR147) During the Breeding and Non-breeding Seasons in the Mare. Abstract 482.

Cardoso RC, Alves BRC, Prezotto LD, Thorson JF, Tedeschi LO, Keisler DH, Amstalden M, Williams GL. 2012. Accelerated Body Weight Gain During the Juvenile Period As a Model to Assess NPY and Kisspeptin Control of Puberty in Heifers, Abstract 481.

Bryan G. White, James W. Frank, Robert C. Burghardt, M. Carey Satterfield, Fuller W. Bazer, Gregory A. Johnson, Kayla J. Bayless. Antagonism of the S1P Signaling Pathway Affects Placental and Fetal Development.

(See **Scientific meetings** on page 26.)

## Contests held at 4-H Roundup

LUBBOCK -- Department of Animal Science faculty and staff participated in the annual Texas 4-H Roundup events held this June at Texas Tech University in Lubbock. Dr. Jason Cleere and Dr. Chris Skaggs along with Dr. Ryan Rathmann, assistant professor of animal science at Texas Tech, coordinated the Livestock Judging Contest which brought together 135 contestants from across Texas. They also coordinated the 2012 T.D. Tanksley Invitational Livestock Judging Contest and Workshop, which attracted 202 contestants.



## Machen hosts Australian farming scholar

Dr. Rick Machen, professor and Extension livestock specialist in Uvalde, recently hosted an Australian cattleman who was visiting Texas as a Nuffield Australia Farming Scholar sponsored by Meat and Livestock Australia.

Ray Vella, from Marlborough, Queensland, Australia, was awarded a 2012 Nuffield Scholarship, a scholarship awarded to farmers in Australia that gives them the opportunity to increase practical farming knowledge and management skills and techniques of farming operations in New Zealand, Europe, Asia and the Americas.

While visiting southwest Texas, Machen led Vella along with his wife Leah on a tour of the Texas AgriLife Research and Extension Center at Sonora where they spent the afternoon with Dr. Butch Taylor discussing grazing management and learning the attributes of prescribed fire as a natural resource management tool. On the second day of their visit, Phil and Linda McAnelly, owners of Brush Country Angue Ranch near Yancy shared their genetic selection and management programs.



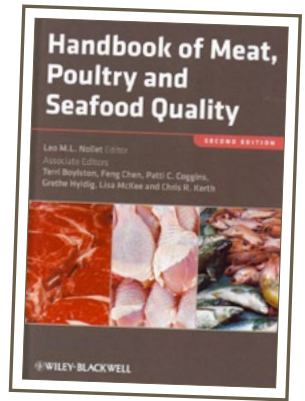
Left, Phil McAnelly, Leah Vella, Ray Vella and Dr. Rick Machen.

The Vellas manage 3,000 Brahman-cross cattle on the family's 18,000 acre ranch near Bald Hills, on the eastern edge of Queensland. In addition to a cow/calf operation, they grass-finish their cattle which are destined for the European market. Vella's goal during his world tour of agriculture is "to tour properties being run productively and efficiently and to implement their concepts back into Australian farming enterprises, with enough flexibility to suit every individual grazing capacity."

The Nuffield Australia Farming Scholars' mission is to develop potential and promote excellence in all aspects of Australian agricultural production, distribution and management through the adoption of local and international best practice, and continuous development of a unique network of industry leaders and innovators, according to the organization's website.

## Kerth serves as associate editor of textbook

Dr. Chris Kerth, associate professor of meat science, served as associate editor of a textbook called, "Handbook on Meat, Poultry and Seafood Quality," for both the first and second editions, the later of which was released this summer. The textbook is described as, "This extensively revised second edition of *Handbook of Meat, Poultry, and Seafood Quality* focuses especially on the different quality factors affecting muscles (beef, pork, poultry, and seafood). ... This book is designed to serve as an essential reference on the quality of muscle food for all professional in government, industry, and academia." The book consists of five sections including details on the general sensory aspects of muscle foods and the quality parameters of beef, pork, poultry, and seafood including shelf life, microbiological and sensory properties and packaging.



## Iraqi meat scientists train at Texas A&M



A group of meat science professors from the University of Baghdad and the University of Tikrit spent July 18-28, 2012, learning from the meat science experts in the Department of Animal Science at Texas A&M. The group participated in a training program in meat science education, lamb/beef production/value added meat fabrication and merchandising strategies through the Borlaug Institute and Texas AgriLife Research and hosted by Dr. Mike McWhorter, assistant director and international training coordinator at the Borlaug Institute for International Agriculture.

Topics covered during the two-week course included an overview of the sheep, goat and beef industries in the United States; food safety and HACCP principles; USDA livestock and carcass grades for lamb and lamb wholesale fabrication, lamb processing and merchandising of retail and foodservice cuts; lamb and beef weights, yields and value; and meat science curriculum and teaching skills review. The training included hands-on participation of lamb harvest, and observation of ANSC 307 laboratory teaching methods in the classroom.

Faculty and staff participating in the training were Ray Riley, Jeff Savell, Davey Griffin, Dan Hale, Wes Osburn, Chris Kerth, Rick Machen and Jason Cleere.



## Aggie REPS attend State FFA Convention



CORPUS CHRISTI -- Animal Science Aggie REPS represented the Department of Animal Science at the 84th Texas FFA Convention held in Corpus Christi July 10-13, 2012. Attending were Hunter Walters, Victoria Pilger, Rachel Bedinger, Callie McCullough, Kley Pruski and Rebecca Hamilton, former Aggie REPS and current graduate student. They were accompanied by Dr. Shawn Ramsey and Kelly Essler. The group visited with FFA members from across Texas about the many opportunities available at Texas A&M University and within the Department of Animal Science. They also talked with agriculture teachers.



## Texas Pork Tour stops in Aggieland

COLLEGE STATION -- A group of 14 Texas 4-H and FFA youth participating in the 2012 Texas Pork Leadership Camp concluded their week-long tour of the Texas pork industry with a stop at Texas A&M University. The Department of Animal Science hosted the group on June 7-8.

The students were taught how to evaluate pork carcasses at Rosenthal Meat Science and Technology Center. With the help of meat science graduate students, the youth applied those techniques to pork carcasses from hogs they had evaluated live earlier in the week. Following evaluation, the students worked under the guidance of the graduate students to fabricate the carcasses and collect yield and data to compare the value differences in the hogs.

In addition, Animal Science Aggie REPS gave the group a tour of the department and campus. The youth also visited local retail grocery outlets, discussed consumer preference and participated in a mock interview on camera regarding issues relevant to the swine industry, and received feedback on methods to achieve effective communications with the media.

The Texas Pork Leadership Camp is sponsored by the Texas Pork Producers Association and is held every year. Participants receive an in-depth view of the pork industry through special tours and hands-on learning experiences, and are taught leadership skills that will enable them to become effective spokespersons for the pork industry.



## Ramsey recognized by sheep, goat group

FREDERICKSBURG -- Dr. Shawn Ramsey received the Texas Sheep and Goat Raisers Association's Special Achievement Award presented at the organization's annual event held in July. The award was given to Ramsey in appreciation for his counseling and instruction to youth involved in the Texas sheep and goat industry. Ramsey is an associate professor and assistant head for undergraduate programs in the Department of Animal Science. He also serves as one of the sheep and goat extension specialists for the State.



## Judging camps held in Aggieland

COLLEGE STATION -- The seventh annual Texas A&M Show Cattle Camps were held at the Texas A&M Beef Center April 27-29, May 18-20 and June 2-3, 2012. Instruction included day-to-day management, show day preparation and developing showmanship skills. The camps were coordinated by Paul Maulsby and Beef Center staff and supported a full capacity attendance.

The Texas A&M Livestock Judging Camp was held May 25-27, 2012 for experienced youth and June 20-22 for beginning to intermediate youth at the Texas A&M Beef Center and Sheep Center. 162 campers from Texas, Colorado, Missouri, Mississippi, California, Oklahoma, Arizona, Georgia, and Louisiana gathered for two days to learn from the experts at Texas A&M about market and breeding animal evaluation of cattle, sheep, hogs and goats. The camp also focused on presenting oral reasons. Current and former TAMU Livestock Judging Team members and coaches served as instructors and assisted during the camp.

The Texas A&M Horse Judging Camp was held June 27-29 and July 11-13, 2012. The students were taught reasons and the correct conformation of the horse and evaluate Western and English Performance classes.

The 2012 Aggieland Lamb Camp was held July 20-22 and the Aggieland Goat Camp was held July 27-29, both at Pearce Pavilion. The camps welcomed nearly 750 attendees including youth and their parents. The main focus of the camps is to teach campers and parents the proper ways to care and raise their animal projects and includes instruction on showmanship techniques, proper facilities, selection criteria, nutrition and health, pre-show preparation, show day activities and exercise programs. Hands-on demonstration were conducted on proper ways to shear, trim hooves and give shots. A showmanship competition was held the last day of the camps. Camp sponsors were SureFed Feeds, Drive by Encore Visions, Sullivan Supply and the Department of Animal Science.



## Saddle & Sirloin Club hosts futurities

BRYAN -- 4-H and FFA youth from around the state exhibited their show animals on Aug. 3-5, 2012 at the Saddle & Sirloin Steer, Heifer and Pig Futurities. 204 head of steer and 153 head of heifers were shown in four rings and judged by Dr. Dave Duello, Dr. John Rayfield, Mr. Mark Core and Mr. Jeff Thayne. The event is a collaborative effort of the Saddle & Sirloin Club and the Livestock Judging Team members.

## Scientific meetings (continued from page 23)

- Wei Ying, Xiaoqi Wang, Kathrin Dunlap, Janessa Short, M. Carey Satterfield, Robert Burghardt, Greg A. Johnson, Irene Ruiz-Gonzalez, Alfredo Q. Antoniazzi, Terry M. Nett, Thomas R. Hansen, Fuller W. Bazer. Regulation of Expression and Consequences of Silencing Translation of Toll-Like Receptors 7 and 8 Messenger RNAs in the Ovine Uterus.
- Kathrin A. Dunlap, Ashley B. Keith, Rebecca M. Simmons, Sorin M. Greff, M. Carey Satterfield. Altered Placentome Morphology and Expression of Angiogenic Factors Are Associated with Compensatory Growth in an Ovine Model of Intrauterine Growth Restriction.
- Xiaoqi Wang, Kathrin Dunlap, M. Carey Satterfield, James Frank, Xilong Li, Wei Ying, Robert Burghardt, Greg Johnson, Guoyao Wu, Alfredo Q. Antoniazzi, Terry M. Nett, Thomas R. Hansen, Fuller W. Bazer. Effects of In Vivo Knockdown of Translation of Arginine-Associated Gene Transcripts in Conceptus Trophoderm on Growth, Development, and Gene Expression by Ovine Conceptuses.
- Ashley B. Keith, Sorin M. Greff, Kathrin A. Dunlap, M. Carey Satterfield. Adaptive Placental Transport in Nutrient-Restricted Ewes Is Associated with Altered Amino Acid Transporter Expression.
- Justyna Filant, Kathrin A. Dunlap, John P. Lydon, Francesco J. DeMayo, Richard R. Behringer, Thomas E. Spencer. Wnt7a Regulates Epithelial Cell Identity in the Developing Postnatal Uterus.
- Wei Ying<sup>1</sup>, Xiaoqi Wang<sup>1</sup>, Kathrin A. Dunlap, Janessa Short, Michael C. Satterfield, Robert Burghardt, Greg A. Johnson, Irene Ruiz-Gonzalez, Alfredo Q. Antoniazzi, Terry M. Nett, Thomas R. Hansen and Fuller W. Bazer. Regulation of expression and consequences of silencing translation of Toll-Like Receptors 7 and 8 mRNAs in the ovine uterus. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Whasun Lim, Hee Seung Kim, Jinyoung Kim, Wooyoung Jeong, Yong Sang Song, Fuller W. Bazer, Jae Yong Han, Gwonhwa Song. Squamous cell carcinoma antigen 1 in the chicken model of epithelial ovarian cancer. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Wooyoung Jeong, Jin-Young Lee, Whasun Lim, Jinyoung Kim, Jae Yong Han, Gwonhwa Song, and Fuller W. Bazer. Identification and characterization of avian pleiotrophin as estrogen stimulated gene in the chicken oviduct and its differential expression patterns in cancerous ovaries. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Alfredo Q. Antoniazzi, Andrea M. Latimer, Jared J. Romero, Gordon D. Niswender, Fuller W. Bazer, Terry M. Nett and Thomas R. Hansen. Detection of interferon-tau in uterine vein blood using a highly sensitive and specific radiomimmunoassay. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Greg A. Johnson, James W. Frank, Robert C. Burghardt, Fuller W. Bazer and Guoyao Wu. A role for osteopontin and integrins in nutrient transport by placentae. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Niamh Forde, Jai P. Mehta, Solomon Mamo, Mark A. Crowe, Fuller W. Bazer, Thomas E. Spencer, Pat Lonergan. Genes encoding for secreted proteins increase during the pre-implantation period of pregnancy in the bovine endometrium and are modulated by progesterone concentrations in vivo. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Xiaoqi Wang, Kathrin Dunlap, Michael Satterfield, James Frank, Xilong Li, Wei Ying, Robert Burghardt, Greg A. Johnson, Guoyao Wu, Alfredo Q. Antoniazzi, Terry M. Nett, Thomas R. Hansen and Fuller W. Bazer. Effects of in vivo knockdown of translation of arginine-associated gene transcripts (SLC7A1, NOS3, and ODC1) in conceptus trophoderm (Tr) on growth, development and gene expression by ovine conceptuses. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Fuller W. Bazer, Jinyoung Kim, Gwonhwa Song, Guoyao Wu. Fructose: A hexose sugar in search of a functional role. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Piotr Dorniak, Fuller W. Bazer, and Thomas E. Spencer. Interferon tau, prostaglandins and cortisol coordinately regulate endometrial function and conceptus elongation in sheep. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Jangsoo Shim, Heewon Seo, Yohan Choi, Jinyoung Kim, Fuller W. Bazer and Hakhyun Ka. Expression of neutral and cationic amino acid transporters in the uterine endometrium, and peri-implantation conceptus and placenta in pigs. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Theodore Wing, Haijun Gao, Xilong Li, Robert C. Burghardt, Guoyao Wu, Fuller W. Bazer and Greg A. Johnson. Expression and regulation of genes for glucose and arginine transporters in pig uteri, conceptuses and placentae. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Bryan G. White, James W. Frank, Robert C. Burghardt, Michael C. Satterfield, Fuller W. Bazer, Gregory A. Johnson and Kayla Bayless. Antagonism of the S1P signaling pathway affects placental and fetal development. 2012; Proc 45th Annual Meeting of the Soc for Study of Reprod, State College, PA
- Dr. Carey Satterfield was an invited speaker and gave the Young Investigator Seminar in the Impact of Maternal Diet on Offspring module. The title of his presentation was, "Differential Fetal Responses to Maternal Nutrient Restriction: A Population Variance Approach."
- Alves and Cardoso each received the 2012 Animal Reproduction in Agriculture Research Fellowship Award for their abstract presentation.

### ■ Aug. 12-17, 2012 - 58th annual International Congress of Meat Science and Technology, Montreal, Canada

Martin, J. N., J. C. Brooks, L. D. Thompson, J. W. Savell, K. B. Harris, L. L. May, A. N. Haneklaus, J. L. Schutz, D. R. Woerner, K. E. Belk, T. E. Engle, J. F. Legako, A. M. Luna, L. W. Douglass, S. E. Douglass, K. Y. Patterson, J. Howe, M. Duvall, J. M. Holden, and J. L. Leheska. 2012. Updating the United States national nutrient database with nutrient data for eight cooked beef cuts. Paper 376 in Proc. Int. Congr. Meat Sci. Technol., Montréal, Canada.

Guelker, M. R., A. N. Haneklaus, J. C. Brooks, C. C. Carr, R. J. Delmore, D. B. Griffin, D. S. Hale, K. B. Harris, G. G. Hilton, D. D. Johnson, C. L. Lorenzen, R. J. Maddock, J. N. Martin, R. K. Miller, C. R. Raines, D. L. VanOverbeke, L. Vedral, B. E. Wasser, and J. W. Savell. 2012. National Beef Tenderness Survey – 2010: Shear-force values and sensory-panel ratings for U.S. retail and foodservice beef. Paper 233 in Proc. Int. Congr. Meat Sci. Technol., Montréal, Canada.

■ In addition, Dr. Marcel Amstalden, associate professor, presented at the Academy of Veterinary Consultants Summer Conference in Kansas City, Mo. held Aug. 3-5. His presentation was entitled, "Nutritional Regulation of the Onset of Puberty: Mechanisms and Implications for Developing Replacement Heifers."

- Williams, G.L., J.F. Thorson L.D. Prezotto I.C. Velez R.C. Cardoso, M. Amstalden, Reproductive seasonality in the mare: neuroendocrine basis and pharmacological control. *Dom. Anim. Endocrinol.* 2012; 43:103-115.
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## SCHEDULE OF EVENTS

**Sept. 11-12 - Introductory HAC-CP.** Register online at [https://secure.touchnet.com/C21490\\_ustores/web/product\\_detail.jsp?PRODUCTID=2892](https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892).

**Oct. 2 - Saddle & Sirloin Club Fall BBQ.** For more information, contact Ashleigh Sowell at <ashleighrsowell@yahoo.com>.

**Oct. 17 - Department of Animal Science Seminar Series.** Dr. Jeff Savell will present, "National Beef Quality Audit." RSVP to Dr. Tryon Wickersham at <tryon@tamu.edu>.

**Oct. 17-19 - Children's Barnyard.** For more information contact Christine Mesecher at <cm.0311@hotmail.com>.

**Oct. 31 - Department of Animal Science Seminar Series.** Dr. Fuller Bazer will present, "Interferon Tau: Pregnancy Recognition and Beyond." RSVP to Dr. Tryon Wickersham at <tryon@tamu.edu>.

**Nov. 3 - 2012 Aggiefest Livestock Judging Contest.** (Pearce Pavilion) For more information, contact Jake Franke at <jfranke@tamu.edu> or call (979) 845-6059.

**Nov. 3 - 2012 Aggiefest Horse Judging Workshop.** (Freeman Arena) Cost to attend is \$15 if registered before Nov. 1 and \$20 after. Register at [www.judgingcard.com](http://www.judgingcard.com). For more information, contact Teri Antilley at <tjantilley@ag.tamu.edu> or (979) 845-5264.

**Nov. 8-9 - Beyond Basics: HACCP Plan Improvement.** Register online at [https://secure.touchnet.com/C21490\\_ustores/web/product\\_detail.jsp?PRODUCTID=2892](https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892).

**Nov. 14 - Department of Animal Science Seminar Series.** Dr. Shalene McNeill with National Cattlemen's Beef Association will present, "Red Meat in a Global Nutrition." RSVP to Dr. Tryon Wickersham at <tryon@tamu.edu>.

**Nov. 28 - Department of Animal Science Seminar Series.** Drs. Gary Williams and Marcel Amstalden will present. RSVP to Dr. Tryon Wickersham at <tryon@tamu.edu>.

**Dec. 4-5 - Introductory HAC-CP.** Register online at [https://secure.touchnet.com/C21490\\_ustores/web/product\\_detail.jsp?PRODUCTID=2892](https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892).

To submit an upcoming event to be listed in the *Animal Science Monthly*, please email [cacoufal@tamu.edu](mailto:cacoufal@tamu.edu).



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## Feature Photo



2012-2013 Aggie REPS (Recruiting Exceptional Prospective Students) will represent the Department of Animal Science at several events throughout the year. They are: *front row, left*, Katie Muehlstein, Whitley James, Jenny Bohac, Lauren Thompson, Katie Heinrich, Katie Fritz, Jessie Hoffman, Susan Waldron, Cassie Holloway, Carina Cedillo and Kelsey Willberg. *Middle row, left*, Michelle Bedenbaugh, Alyzabeth Looney\*, Dottie Cook, Victoria Pilger, Rachel Bedinger, Kaysi Dean, Kaley Wall, Sydney Reese, Alycia Crandall, Audra Wilburn and Callie McCullough. *Back row, left*, Tyler Coufal, Katie Burchfield, Mallorie Phelps, Hunter Walters, Henry Hilscher\*, Mike Helle\*, Cameron Olson, Stefan Tucker, Misty Jackson and Kley Pruski. *Not pictured*, Megan Webb, Crysta Stallwitz, Rachel Brooks, Kristin Valadez, Brent Hale and Lea Luensmann. (\*Graduated in May)