

MTSU School of Agribusiness & Agriscience

(615)898-2523 • www.mtsu.edu/abas

Stories and Pictures by ABAS Faculty, Staff and Students

Compiled by Dr. Warren Gill

Revised and Published by Dr. Jessica Carter and Mrs. Kym Stricklin

2009-10 Was a Great Year for ABAS

Warren Gill, Director
MTSU School of Agribusiness
and Agriscience (ABAS)

This has been a great year for the Ag School at MTSU!

With an official enrollment of 438 majors, the School of Agribusiness and Agriscience hit an all-time record in the Fall of 2009.

The Horse M.S. was approved. This is a great addition for our Horse Science Program. We plan to take applicants this Fall and start the program in the Spring semester of 2011.

The new farm is coming together very well. Bids are being taken on the new dairy, so construction should start this fall. The student gardens and nursery are developing nicely, primarily due to Ag Enhancement funds from Commissioner Ken Givens and the Department of Agriculture.

Other highlights:

- Faculty generated over a half million dollars in grants.
- Ag Ed's dual credit program added an Ag Business course and continued to offer a Greenhouse Management Course, giving high school students even more contact with ABAS.
- The Horse Judging Team won two major contests. The Equitation Team also had a very successful year, as did the Dairy Products Evaluation Team.
- We had a successful Fall Field Day, with over 150 in attendance.
- Raiderfest, where High School Ag students visit the Ag School and attend a football game, was held before the Mississippi State game and 125 students participated.
- Ag Career Day drew employers from across the state to interview dozens of ABAS upperclassmen. A highlight this year was an unusually high number of internships being offered.



Greg Anderson presents Amy Dyer with the Tennessee Council of Cooperatives scholarship while Dr. Gill looks on.

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MTSU Ag Enrollment Hits Record High

With an official enrollment of 438 majors, the School of Agribusiness and Agriscience hit an all-time record in the Fall of 2009. This represented an increase of 21 percent over 2008.

A large part of the growth was due to a large Freshman Class - 141 majors. In case you are interested, the Freshman class was 65% female.

Actually, by November, the number of majors had grown to 461. Since this primarily represents students who changed their majors, this is an even more impressive statistic because it indicates that other MTSU students are hearing good things about our program and are coming to where the action is!



SPOTLIGHT

MTSU Equestrian Team member Korry Bailey, Interdisciplinary Studies major, won the world championship in the Youth Cow Horse Competition. Riding her horse Sparking Champ, Korry beat all the cowboys from Texas and Oklahoma. The working cow horse is a fast and exciting class to watch that combines both a reining pattern and cow handling work.

MTSU Agricultural Field Day Successful in Spite of Rain Delay

Last September over 150 people attended the Field Day hosted by MTSU's School of Agribusiness and Agriscience (ABAS) at the new MTSU Agricultural Laboratory Farm on Guy James Road.

Highlights included a tour of the new student gardens and nursery led by Dr. Nate Phillips, a composting demonstration by Dr. Warren Anderson, an update on haylage production by Dr. Warren Gill and Dr. Jessica Carter and a tour of newly established native warm season grasses and alfalfa by Tim Redd and Danny Troup.

The Tennessee Department of Agriculture's Tennessee Ag Enhancement Program (TAEP) was featured. John Hood, former State Representative and current MTSU Director of Community Engagement and Support, kicked off the event by introducing Commissioner of Agriculture Ken Givens. Givens pointed out the important role of the millions of dollars that the Tennessee Ag Enhancement Program has played in improving Tennessee's competitiveness in the agricultural economy.

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Several aspects of the field day were related to the Ag Enhancement Program. It was announced at the field day that a packing shed for the student garden produce (see p. 10) would be supported by TAEP, as well as the haylage study discussed by Dr. Gill.

At the end of the day, Dr. Justin Gardner gave a short presentation about marketing. Dr. Gill recognized the hard work of the Farm Lab staff, under the leadership of Tim Redd, in preparing the new MTSU Farm Lab for the Ag Enhancement Field Day.

Sponsors of the event were very important. They included: **CPC** (Jody Blankenship and Jerold Cook), **Destron Fearing** (Randall Morris), **Farm Credit Services** (Jim Clark), **Boehringer-Ingelheim Vetmedica** (Stacy Turner), **Hooper Supply** (Bruce Hooper), **Rutherford Farmer's Co-op** (John Henderson and Brian Ladd), **Shering Plough-Intervet** (Beth Jones), **Tennessee Farmer's Co-op** (Keith Harrison), **Tri-Greene / John Deere** (Richard Miller and Davey Britton), **Tru-Test Scales** and **Speed Rite Fencing** (Jason Jones) and **W-W Livestock Systems** (Brian West).

Rutherford Extension assisted with several planning aspects of the program, such as providing the sound system, as well as the implementation of the warm season grasses demonstration.

2010 Ag Field Day

Plan now to attend the next Field Day starting at 4 pm on Thursday, September 23. You will be pleasantly surprised at the changes since last year!



(from left) Commissioner of Agriculture Ken Givens, Dr. Warren Gill, former Rep. John Hood, and TN Farm Bureau President Lacey Upchurch



MTSU Builds Community Garden with Habitat for Humanity

Drs. Nate Phillips and Warren Anderson, students from ABAS, and the Rutherford County Habitat for Humanity have partnered together in establishing a community garden. This project was initiated through conversations with Beth Smith, the director of Habitat for Humanity; Drs. Bonner and Owens from the MTSU Office of Community Engagement and Support; ABAS; and UT Extension personnel.

The objective is to assist community members associated with Habitat for Humanity in learning gardening skills that they can use to grow their own produce. Funds and materials were solicited through donations for the construction of the first raised bed.

In October, a kick-off event with a table top demonstration of "lasagna" gardening was held.



ABAS students layered the bed with cardboard, newspaper, leaves, coffee grounds, egg shells and compost to complete the first lasagna garden.



Foliage Face-Lift

Horticulture and Horse Science work together to give the Horse Science Center a new look

by Allison Armstrong, ABAS senior

If you've visited the Horse Science Center in the past six months or so, you probably noticed changes at the main entrance. Dr. Nate Phillips, assistant professor of horticulture, and students from his landscaping class worked throughout the Fall semester to beautify the HSC in what Phillips termed their —most ambitious project yet.

Plans for the new look have been in the works since fall of 2007. The students began planning their designs by visiting the site and interviewing Horse Science professors to get an idea of the scope and demands of the project. Each group created a design for the HSC's façade, including the shape of flower beds, locations, and types of plants that would be included.

Students submitted their designs to a panel of judges that included Dr. Dave Whitaker, Dr. Patrick Kayser, Dr. Nate Phillips, and landscape designers from the community. The judges selected a winner and the work began.

The winning design includes a beautiful brick retaining wall that curves around the front side of the building and frames the main entrance. Plant beds feature evergreen plants, small shrubs, flowering perennials and ground-cover perennials. Plant species were

selected to create interest and color year round. The design will draw the eye to the left side of the building, where an Alumni Garden and a Walk of Honor will one day be installed.



"The most challenging part of this experience was definitely constructing a retaining wall," said Daniel Messick. Messick, a sophomore Plant and Soil Science major, who worked on the winning design. "You have to figure out the proper amounts of gravel and rock and make sure everything's level."

Dr. Phillips explained, "It's the first time this class has done a hardscape. Many students don't realize the difficulty of installing a design until they do it. They also learn about deadlines and working in inclement weather."

Dr. Phillips and his students worked on the project regardless of rain, mud and cold. Dr. Phillips said, "It's a chance to get outside and a great way to learn theory and apply it. Students can put this project on their resumes." A photographic record was taken of the project, which is important for the students' marketing their abilities.

The project was completed the first week of December. One look at the before and after photographs of the project demonstrates how much can be accomplished by a collaboration of departments in just one short month. Dr. Nate Phillips would like to thank MTSU alums and local landscape designers **Pam Rowlette** and **George Dodson** for their assistance in this project.

SPOTLIGHT

State Representative Joe Carr and his son, Joe Jr., visited the Dairy Unit and the Guy James Farm in April. Representative Carr also attended the June Dairy Day and the ABAS Ag Banquet. He showed great interest in our programs, and is obviously an accessible supporter. If anyone would like to receive emails with legislation updates, contact Rep. Carr at his email address:

rep.joe.carr@capitol.tn.gov



Tim Redd, Vanessa Young, Joe Jr., Rep. Joe Carr, and Ralph Smith.

Raiderfest was the Best

The Third annual Raiderfest was very successful. The event, hosted by the MTSU School of Agribusiness and Agriscience (ABAS) and organized by the ABAS Student Council, welcomed 125 high school agriculture students from across the state.

Raiderfest gave future agriculture students the opportunity to attend agriculture seminars, visit the MTSU Campus and tour some of the farm laboratories. It also gave them the opportunity to meet and greet with industry professionals, the MTSU ABAS faculty, and student agriculture organizations.

Most of all, the students who joined in Raiderfest had fun. ABAS students organized numerous events and treated the students and other guests to hamburgers, hot dogs and all the trimmings, and capped the day with a great football game.



Gina Locke, from Page High School in Williamson County shows off her new paint job.

2010 Agribusiness and Agriscience Job Fair Was Successful!



The recent MTSU career fair for Agriculture students was a success! The employers were recruiting students for Ag Business, Plant Science and Animal Science positions, as well as for internships and graduate school opportunities.

The event lasted only 4 hours and was busy the entire time. Students, dressed and groomed for the occasion, kept the exhibitors occupied with a constant barrage of questions and a shower of fresh resumes.

A pile of pizzas shared by students, employers and faculty capped the event.

The Ag Career Day was sponsored by the Student Agriculture Council, the staff and faculty of the School of Agribusiness and Agriscience and the MTSU Career Development Center.



Erica Alexander, senior agribusiness major, talks with USDA agent Wayne Robertson



Steven Foe discusses internships with Kyle Holmberg from the Tennessee Department of Agriculture

Ag Alumni Have a Board of Directors

Ag Alumni of MTSU have come together and formed a new association. They formed an ad hoc planning committee in 2009, wrote bylaws and had a kick-off meeting. Now they have a board of directors. Ag Alumni are alive and well

The board has 13 members:

Cindy Ayers, Christiana, TN, 1978-80
Glen Beard, Watertown, TN, 1959
Jonathan Black, Knoxville, TN, 2009
John Campbell, Lewisburg, TN, 1975
Jim Clark, Murfreesboro, TN, 1994
Ron Cooper, Murfreesboro, TN, 1964
Joshua Crain, McMinnville, TN, 2000
Sam Dennis, Murfreesboro, TN, 1979
Will Jordan, Murfreesboro, TN, 1982-85
Brian Ladd, Murfreesboro, TN, 2005
Charles McDonald, Shelbyville, TN, 1972
Barbara Sherman Sherrell, Antioch, TN, 2005
Robert Strong, Gainesville, FL, 1996

AG ALUMNI FACTS:

- The name of the organization is *Middle Tennessee State University's Ag Alumni*.
- For now, there are no dues to be paid.
- The bylaws, as amended, may be viewed on the *Agribusiness and Agriscience Website*:
<http://www.mtsu.edu/abas/>

Plans are underway for Ag Alumni activities in the fall.

GET INVOLVED—Would you like to be a part of this great association? Contact Dr. Warren Gill at 615-898-2404 or by e-mail at wgill@mtsu.edu.

2010 Ag Banquet Was a Success

Over 140 students, faculty, parents and friends attended the 2010 Ag Banquet held at the Community Center in the Lane Agri-Park. All agreed this year's event was unusually successful.

The event was dedicated to **Mrs. Janet Kelly**, who recently left the School of Agribusiness and Agriscience after 22 years of excellent service to assume a student advising position with the School of Nursing.

A major highlight of the event was the awarding of almost \$22,000 in scholarships to 21 deserving students.

Two new Endowments were also announced. These are the Joe Jack and Jerry Dement Endowment and the Robert R. (Bob) Garrigus Scholarship Fund Endowments.

Sponsors for the event were **Tennessee Farmer's Co-op**, **Bart Krisle** (President of Tennessee Farmer's Co-op), **Rutherford Farmer's Co-op** and **Farm Credit Services**.



Janet Kelly receives a gift from Dr. Cliff Ricketts

The MTSU Agriculture Scholarship Program awarded \$22,000 in scholarships at the 2010 Agriculture Banquet to 21 ABAS students.

Scholarship Award Recipients

Dairy Science Club	Julie Ozburn
Catherine Ellington	Blake Everett
Robert Alexander	Kelley Gallagher
TN Council of Coops	Kelsey Graham
Mark Moskovitz.....	Kolby Wyant
Robert Jarrell Memorial.....	Eric Fold
Hayden Memorial	Laura Harrington
Theodore Bigger.....	Will Lowe III
Heritage Farm	Jeffrey Turner
Ag Endowment	Michelle Sadler
Ag Endowment	Jess Stembridge
Ag Endowment	Chad Hardy
Hugh Burrum.....	Ethan Pipkin
Hugh Burrum.....	Megan Pohl
Hugh Burrum.....	T. Dalton Pate
Collegiate FFA	Julie Ozburn
Fowler and Ruth Nickle	Eric Limbird
TN Farmers Coop	Sarah Norman
TN Farmers Coop	Daniel Messick
TN Farmers Coop	Andriana Jones
TN Farmers Coop	Lauren Jordan
Adams Family.....	Lacey Parchman

MTSU School of Agribusiness and Agriscience Announces the Joe Jack and Jerry Dement and Robert R. (Bob) Garrigus Scholarship Endowments

Joe Jack Dement and Bob Garrigus were both beloved Professors in the Ag School at MTSU for many years. It is an honor to announce the formation of two new MTSU School of Agribusiness and Agriscience Scholarship Endowments in honor of these great men and to ask you to consider contributing to these Endowments so we can make them truly honor Joe Jack and Bob. Short descriptions and websites:

Joe Jack and Jerry Dement Endowed Scholarship Fund: This endowment is established by the family and friends of Joe Jack



and Geraldine (Jerry) Dement for the purpose of honoring Joe Jack for the many years of exceptional service that he provided to the students in the School of Agribusiness and Agriscience at Middle Tennessee State University. The service that both Joe Jack and Jerry have given to improve the lives of countless people through their devotion to the Farm Bureau, Farm Service Administration, the Natural Resources Conservation Service and the AGR Fraternity is insurmountable. Website for more information about supporting this Endowment: http://www.mtsu.edu/abas/Dement_endowment_flyer_3_25_10_FINAL.pdf

Robert R. (Bob) Garrigus Endowed Scholarship Fund: Dr. Robert R. Garrigus, known as either Doc or Bob by literally hundreds of people, obtained his Ph.D. from the University of Kentucky and, after five years at Purdue, came to Middle Tennessee State University in 1967 where he soon established himself as a popular and effective Professor of Animal Science. He was the advisor of the Block and Bridle Club which was twice recognized as the most active chapter in the nation. His judging teams won more national (NACTA) championships than almost anyone. Website for more information about supporting this Endowment: http://www.mtsu.edu/abas/Garrigus_endowment_flyer_5_6_10.pdf



Meet the MTSU Farm Lab Staff

Because the Farm Lab staff are such an integral part of the School of Agribusiness and Agriscience, we would like to introduce you to them and explain what they do. There are six members of the Farm Lab Team, each assigned to a specific area of expertise; but at any time they can be found helping each other out as needed. All staff are assisted by student labor, without whom their jobs would be impossible. The real products produced by ABAS Farm Laboratories are the experiential learning that occurs and the good work ethic that is developed.

Tim Redd is the Farm Lab Director. He does everything, which includes teaching a class most semesters (e.g. Field Crops, Swine and Dairy Production, Dairy Product Evaluation, Milk Processing). He is on top of and completely involved in every aspect of the Farm Labs activities. For example, he can be found in a tractor or under it doing repairs, instructing classes on artificial insemination, operating the separator in the milk processing lab, or conducting artificial insemination on honey bees. Not to mention all of the administrative details and representing the university with tours and presentations. In a third party audit of our farm laboratory program, it was stated that Tim got more out of his staff and accomplished more with less money than other programs.

Dan Troup is the Field Crops Manager. His responsibility is to provide the majority of the food for the livestock, as well as to conduct special university or industry-lead research projects and test plots for seed development. He prepares fields, plants, harvests and maintains the equipment for corn, soybean and hay production. He is certified for spraying pesticides and herbicides. This past Fall he participated on the Dairy Product Evaluation Team as a graduate member. He won first place in both Ice Cream and Cottage Cheese.

Daniel Boyer is the Beef and Swine Herdsman. A small herd of goats have been added to his responsibilities. Daniel is very involved in the Livestock

Management classes that are held year round during Fall, Spring and Summer sessions. Most of the livestock research projects are conducted on the beef and swine, which keeps him constantly involved with the ABAS students, faculty and often industry personnel. School tours and presentations are part of his regular schedule. He and his students also give a hand in the hay field, milk processing plant, bee apiary and even the garden plots.

Jason Tanner is the Dairy Herdsman. He is responsible for approximately 100 head of Holstein and Jersey dairy cattle, including one that is fistulated. A fistulated cow is one that has had a port implanted through the cow's side to have access to the cow's stomach. The purpose is for digestion research. Most of the preschool, grade school, home school, YMCA, and Boy and Girl Scout tours take place at the dairy. Spring and summer of 2010 brought 471 children touring the MTSU Dairy. Jason also participated as a graduate member on the Dairy Product Evaluation team. He won first place for Yogurt.

Ralph Smith is the Assistant Dairy Herdsman. The cows are milked twice everyday at 3am and 3 pm, and then there's the feeding, animal husbandry, maintenance, ABAS classes and research, tours, Farm Days, FFA involvement (high school and collegiate), and Judging contests. Since Ralph came to MTSU Farm Labs with invaluable dairy-

Thank You!

The MTSU Farm Labs staff would like to acknowledge all of the support received from the university, alumni, industry and community—Thank You!

ing experience and is well ingrained in the Agriculture community in Rutherford County, he is a tremendous asset.

Liz Troup is the Milk Processing Manager. The MTSU Milk Processing plant is the only university educational facility left in the state. We pasteurize and homogenize the milk from the Dairy Lab for use in the dining facilities and daycare on campus. Classes such as Milk Processing and Marketing utilize the Milk Processing Plant for student hands-on application during actual processing. Other class application involves lab exploration into making butter, cheese and bacteriological sampling. Randolph and Associates, a food and dairy consultant firm out of Birmingham, Alabama, utilizes the plant as a demonstration model during their Pasteurization and Sanitation workshops. These workshops expose MTSU to the dairy processing industry across the nation. Liz assists with the Dairy Product Evaluation team in sample preparation, and participated as a graduate member in which she won Cottage Cheese. She is also involved with the Beekeeping courses, maintaining the MTSU apiary, and of course providing chocolate milk for tours and presentations.

Block and Bridle Club Activities

The MTSU Block & Bridle club has had a successful year. Highlights from the 2009-2010 academic year included a trip to the national B&B convention that was held in Louisville, KY during the North American International Livestock Exposition. Activities during the convention included tours of agriculture enterprises in Kentucky, attending the NAILE, and participating in educational sessions and the awards banquet. Nine members and their advisor, Dr. Jessica Carter attended the convention.

Other activities that kept club members busy included showing beef cattle, hosting the Little "I" show on campus in November, hosting a Preview steer & heifer show for youth in February at the Tennessee Livestock Center, as well as several meetings and fundraising events. Members wrapped up the academic year in June by hosting the 20th annual "Beef Camp". Forty-eight youth from across Tennessee participated in Beef Camp. Thanks to all of the students for your hard work!

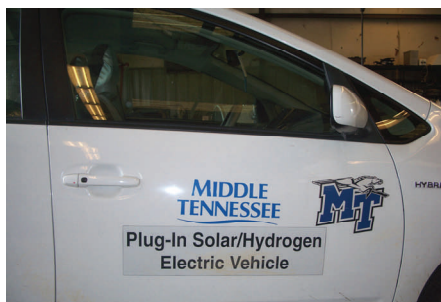
Dr. Ricketts Continues Alternative Fuels Research



The alternative fuel research continues at MTSU with Dr. Ricketts and his students, along with Jo Borck of Calgary, Alberta, Canada. The latest completed project is the conversion of a 1976 Corvette Stingray to run off natural gas, which is pictured to the right. A fueling station was also installed in the Vo Ag shop since natural gas was already in the building for the natural gas heat.



Work also continues on the **Toyota Prius hybrid**. With the 10 kilowatt lithium iron phosphate battery pack, it has a range of 50 miles. Another battery pack is being added to extend the range to 100 miles in the pure electric mode. The engine is being converted to run off hydrogen. Once completed by September 30, the vehicle will have a 300-400 mile range with sun and water being the only fuel sources.



SPOTLIGHT

In October 2009, **King Emmanuel Adebayo** of Emure, Ekiti Kingdom of Nigeria, and his delegates visited MTSU. They were very interested in our agricultural practices, health, education and mass communications. The king tried to talk Daniel Boyer into returning to Nigeria with them to improve their small ruminant farm practices. The king could not eat or drink in public so he missed out on our chocolate milk, but he was very interested in the operation of a small milk processing plant and the pasteurization process.



photo by News and Public Affairs

MTSU Farm Labs Educate the Public



In addition to the daily operation of the farm units, the Farm Lab staff stayed busy last year providing educational outreach to both the local community and the agricultural industry. They conducted tours of the Farm Lab units for approximately 30 school groups (preschool through college), and they also had the privilege of hosting international and political visitors.

The annual audience reached by the MTSU Farm Labs staff exceeds **5,000 people**, and that's not counting the ABAS students who work on and utilize the farm laboratories for class experiential learning.

The Farm Labs staff represents MTSU and the School of Agribusiness and Agriscience when they take MTSU students, equipment, crops, milk, livestock and bees to numerous events throughout the year, including: Ag Day on the Hill; Jr. Beef Expo; Beef Camp; 4H Fair; Beginning and Advanced Beekeeping; ABAS Field Day; Raiderfest; Aramark Sustainability Day; Leadership Rutherford; industry workshops; TN Youth Cattle Association; Bedford County Environmental Awareness; Farm Days at McFadden, Oakland's Mansion and Sam Davis Home; Mitchell Nelson Career Day; Science, Math and Technology Camp; June Dairy Day; Ag in the Classroom; National Dairy Product Evaluation Contest; state and county fairs.

In April the staff hosted agriculture students from Reaseheath College in England. The students were awarded a grant to investigate the food industry, and they chose Middle Tennessee. Since we had contacts with state regulatory and local industry, Tim Redd was able to schedule a very thorough and diversified tour. He arranged a presentation by John Sanford, TN Department of Agriculture Food and Dairy Manufacturing Administrator. He also organized tours of the MTSU Farm Labs, Kroger's milk processing plant Heritage Farms, Rich's Frozen Foods, LaVerne COOP, and Bonnie Blue goat dairy in Waynesboro. We were invited to reciprocate the visit, and our Dairy Science Club is considering the trip over Spring Break 2011.

MTSU to Host Delta Tau Alpha National Convention in 2011

After over 20 years of travelling to other Delta Tau Alpha (DTA) member campuses, MTSU will once again host the National Convention on campus in 2011. Meeting rooms on campus have been reserved and plans are being made to tour and entertain students from 31 different universities across the United States. MTSU chapter members spent substantial time last semester discussing how to organize the meeting and where to take convention attendees, and now look forward to hosting "our meeting."

DTA National Conventions traditionally feature interesting and educational field trips to local and regional agricul-

tural enterprises in addition to conducting the business that needs to be accomplished. For example, recent conventions included tours of feedlots and wind farms (KS), swine and tobacco farms (NC), fish hatcheries and commercial greenhouses (MO), and arid forage management operations (West TX). We want to make the 2011 convention as good as or better than those in recent memory. If you are interested in hosting a tour of your agriculturally based operation, contact Dr. Johnston as soon as possible (615-898-2421 or Johnston@mtsu.edu). No plans have been finalized yet and the

chapter would love to feature tours involving past MTSU DTA members.

We would also like to invite all past members of MTSU DTA to come back to campus and join us during the convention. The meeting is currently being planned for March 7-9, 2011; we'll finalize the exact dates once we've got firm reservations for tours and a visit to the Grand Old Opry. Join us on campus and see how the campus has changed, relive your experiences as a member of Delta Tau Alpha, and visit with friends, old and new. If you want, we'll even put you on the alumni team in the Ag Olympics!

Dairy Science Club



The Dairy Science Club was active in several very interesting events this year. They hosted a two day Artificial Insemination Certification Workshop for collegiate students, sponsored the Beekeeping Courses, and won money and awards for their dairy cattle in judging contests at the TN State Fair, as well as several county fairs.

Their annual trip during Spring Break was to California and Arizona. They toured a rotary dairy, cattle feedlots, feed mills, compressed hay for export facilities, and the Imperial Valley Irrigation Farming District. Along the way they enjoyed authentic Mexican food, ate at the Stockman's Club and visited the Birch Aquarium in San Diego.

Angus Heifers Place at Local Shows



Matthew Deist, Aelin Johnson and John Herrington exhibited cattle at the 2009 Tennessee State Fair.

The MTSU Farm Laboratory had a successful year with Angus genetics. Members of the Block & Bridle club exhibited three Angus heifers at county fairs and the Tennessee State fair in 2009. Students who helped prepared the cattle for shows included Matthew Deist, John Herrington, Aelin Johnson, and Amanda Waller. We had a class winner at two shows.

The top heifer (MTSU Sally 878) was entered in the Tennessee Beef Agribition show and sale. The heifer won her class in the show. Best wishes to her new owner, Triple A Farms of Bethpage, TN. The heifer was cared for and groomed by members of the MTSU Block & Bridle club, Daniel Boyer (MTSU beef unit manager), and Dr. Jessica Carter. Look for more cattle to be exhibited at upcoming fairs this fall. If you have any inquiries about our beef cattle, please contact Dr. Carter. We have Angus and Charolais bulls available for purchase.



Matthew Deist exhibiting a heifer at the 2009 Tennessee State Fair.

M.S. Degree in Horse Science is Approved – Will Start in January 2011

The Master of Science (M.S.) in Horse Science received final approval from the Tennessee Higher Education Commission in June 2010. The goal from the onset was to develop a comprehensive program to meet the needs of our students and the industry. Sustainable business and agriculture principles apply to the horse industry; however, adaptation of these principles specific to the horse industry are not traditionally taught at the graduate level in animal science programs. Specialization within the industry demands that equine professionals possess advanced technical knowledge in such areas as recreational and risk management, teaching and coaching, sales and marketing, facility management, equine physiology and psychology, as well as being a knowledgeable horseman.

The proposed curriculum is designed to prepare graduates trained for the multifaceted equine industry. The M.S. in Horse Science at MTSU will tailor a program to match a

student's interest and produce graduates able to adapt to and thrive in this dynamic field. Students may choose one of three concentrations: Equine Physiology, Industry Management, or Equine Education. This M.S. program will provide a depth of knowledge in equine science and increase a graduate's comprehension of disciplines that interface with the equine industry.

The start date for the program is January 2011. For further information about the progress of the Master of Science in Horse Science and application deadlines, please check out our website or contact Dr. Patrick Kayser at 615-898-2832.

MTSU is the Land of Milk and Honey



Tim Redd instructing beginning beekeeping class.

MTSU is truly the Land of Milk and Honey, because not only do we have the only educational milk processing facility left in the state, but now we also have an apiary. In the Spring of 2009, the Dairy Science Club began a sponsorship of Beginning and Advanced Beekeeping training courses.

The courses are conducted by MTSU Farm Laboratories Director, Tim Redd, Joe Jack Dement (who taught beekeeping here on campus years ago) and Edwin Holcombe. The instructors bring almost 80 years of combined experience to the courses, which are open to the public as well as students, and the class size usually averages about 15-20.

The Beginning Beekeeping course in April includes instruction and hands-on beekeeping. Each student builds their own hive and receives a package of bees with a queen. The Advanced Beekeeping

course in September is also hands-on and covers disease and over-wintering.

We have hives located on campus near the Horticulture Center, and another apiary is located near the garden plots at the Guy James Farm.

Not only is honey a natural sweetener, but it is also a method to build up your allergy immune system by providing small doses of local pollen. And, of course, the most important benefit of bees is their role as pollinators.

SPOTLIGHT

SAYING THANKS—Students in Dr. Tony Johnston's agricultural engineering class, shown below, work to update and expand the garden area at the Tennessee Veterans' Home on Compton Road in north Murfreesboro as part of a project combining civic engagement and practical application of their new knowledge. Clients, staff and visitors at the health care facility for military veterans and their spouses use the area for relaxation, breaks, small group meetings and the like.

The project is featured in the June edition of 'Middle Tennessee Record,' MTSU's monthly video magazine.



photo by News and Public Affairs

Ag Develops Cool Way to Keep Veggies Fresher

by Randy Weiler

Reprinted with permission from the July 12, 2010, edition of *The Record* (Vol. 19, No. 1).

MTSU's School of Agribusiness and Agriscience has developed a cool way to make the MTSU Farm's harvest of vegetables and fruits remain fresher longer.

Two 10-foot-by-10-foot air-conditioned walk-in packing sheds have been built on the approximately 450-acre farm property on Guy James Road, just off Halls Hill Pike east of campus.

With more crops being harvested, the packing sheds are holding more produce such as tomatoes, lettuce, onions and watermelons, keeping them cooler—and fresher—for this summer's Student Farmers Market Fridays at the Horticulture Center.

Wheels began turning when Dr. Warren Gill, the department chair, worked with state Commissioner Ken Givens to secure \$34,300 in state agriculture enhancement money. MTSU's Office of Research and Sponsored Programs then "matched it to help the student program and allowed us to sponsor student research," Gill said.

Daniel Messick, president of the Plant and Soil Science Club, conceived a geothermal idea for the packing sheds, making it more ecologically friendly, Gill said. Messick and assistant professor Dr. Nate Phillips then collaborated on a \$27,000 grant to make the project happen.

"I did a lot of research (about the geothermal method) and organized interviews (with prospective companies)," said Messick, a junior ag-science major and environmental science minor from Shelbyville. "Dr. Phillips and I came together on the proposal."

"The student became the teacher" is how Gill summarizes Messick's creative thinking.

"This is hands-on learning," said Tim Redd, MTSU's Farm Lab director. "This is a student lab, pure and simple."

"It gives the students more access to experiential learning—what they'll see in their future careers," Phillips added.

The university contracted with Precision Air to build the packing sheds and provide the geothermal method, digging a 6 1/2-inch hole 300 feet into the ground adjacent to the facility housing the packing sheds. It brings a constant 55-degree temperature to the cooling units.



Dr. Nate Phillips, left, and Dr. Warren Gill, right, join agriculture-science major Daniel Messick to inspect the new packing sheds at the MTSU Farm off Halls Hill Pike in the photo above. Messick suggested that the sheds, which are used to keep produce fresh for the Student Farmers Market, use geothermal technology to keep temperatures consistent and remain ecologically friendly.

photo by News and Public Affairs

Outstanding Senior Awards

**Robert A. Alexander Outstanding
Agribusiness Senior Award**

Erica Alexander

Outstanding Animal Science Senior Award

Bridget Lambert

**Sam Paschal Award for
Outstanding Horse Science Senior**

Brittany Nutini

**Theodore C. Bigger Outstanding Plant
and Soil Science Senior Award**

Amy Dyer

**B.B. Gracy, Jr. Outstanding
Agriculture Senior Award**

Jessica Morgan

Equestrian Riders Win National Title

The Intercollegiate Horse Show Association (IHSA) national championships were held at the KY Horse Park in Lexington, KY in early May. ABAS' Western Riding Team competed along with individual riders in Western and English events. It was a great venue, and ABAS' riders had a great showing.

Megan Hephner won two individual national championships and alumna Kim White from Lebanon won a national title, also in Western competitions. Brook Davis was Reserve National Champion in the English competition.

Other winners include seven additional top five finishes, and 11 of 12 of ABAS' riders finished in the top 10 in the country in some event. ABAS' Western Team finished 3rd best in the country. The team is coached by **Anne Brzezicki**, Jessica Schultz, Faye Lynn Coffey, and Racheal Hunt.

Baker's Dozen Present at Scholars Day

ABAS Students presented thirteen Posters at MTSU 2010 University Scholars Exposition on Friday, March 26.

Following are the students and their topics (and project advisor):

- Lindsay Crandall – The Welfare of Walkers, a Game Theory Approach (Dr. Gardner)
- Kelsie Graham – Ergot Alkaloids in Kentucky 31 Tall Fescue Haylage Are Apparently Higher Than in Comparable Hay (Dr. Gill)
- Ashley Harris – Oh S.N.A.P.! (Dr. Gardner)
- Sarah Haynes – Sensory Evaluation of Meads Made from Different Honey Sources (Dr. Johnston)
- Sarah Hovis – The Distribution of Iron, Manganese and Magnesium on the Nashville Basin Landscape (Dr. Anderson)
- Anne LaVoie – Effects of Endo-fighter® Mineral Supplementation on Beef Cow Behavior (Dr. Carter)
- Annie LaVoie – Farmville Provokes Players to Use Economic Strategy (Dr. Gardner)
- Steven Locke – Price and Production Risk in Agriculture (Dr. Gardner)
- Jessica Morgan – The Effects of Endo-fighter® Mineral Supplementation on Beef Cow and Calf Performance (Dr. Carter)
- Matthew Sams – Minimizing Mineral Cost in Order to Maximize Cattle Profits (Dr. Gardner)
- Tiffany Scott – The Effect of Anthelmintic Treatments on Gastrointestinal Nematode Infection in Meat Goats (Dr. Carter)
- William Simmons – Farm Lab Wiki (Dr. Gardner)
- James Tipps – Poinsettia Production from Cuttings to Marketing in the MTSU Greenhouse (Dr. Phillips)

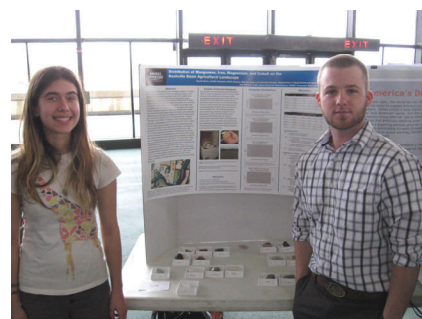
We are very proud that ABAS students are participating in student research and presenting their findings during Scholar's Week at such a high rate.



Annie LaVoie



Kelsie Graham and Dr. Gill



Caitlin Shannon and Mark Graves

MTSU Horse Judging Team Wins Big at AQHC



Team members are (rt. to lf.) Patrick Davis, Brittany Lehman, Megan Hephner, Kristen Chandler, Samantha Cobb and Dr. Dave Whitaker, coach and director of the MTSU Horse Science Program.

The MTSU horse judging team won all three divisions and the overall top award at the American Quarter Horse Congress horse judging contest held in Columbus, Ohio, October 14, 2009.

With over one hundred individual competitors in the senior college category, the MTSU team walked away with individual honors by all five members. Lehman earned first place awards for the most points in performance judging and fifth overall score. Chandler placed in the top ten in every division and finished the day third overall. Hephner placed in the top five in reasons and conformation judging and was fourth overall. Cobb talked her way to the first place in the oral reasons division, while Davis was sixth in performance judging.

6th District Congressional Candidates Forum Succeeds on Numerous Levels

Ten Candidates for the Congressional seat being vacated by Bart Gordon gathered on a stage in the main pavilion of the Tennessee Livestock Center on Tuesday, July 13, and addressed agricultural issues before a crowd estimated at three hundred people.

The event, hosted by the Rutherford Farm Bureau and the MTSU School of Agribusiness and Agriscience (ABAS), was focused primarily on agricultural issues, but candidates also addressed issues ranging from immigration to health care to the environment.

Pettus Read, the Director of Communications at the Tennessee Farm Bureau, was the Master of Ceremonies. Candidates in attendance were Jim Tracy, Lou Ann Zelenik, Ben Lemming, Dave Evans, George Erdel, Gary Mann, Kerry Robers, Brett Carter and Stephen Sprague. Diane Black did not attend, but sent Andy Nash in her place.

Marvin Whitworth, Chairman of the Rutherford County Farm Bureau Advisory

Board, organized the event with the assistance of Dr. Warren Gill, Director of the School of Agribusiness and Agriscience. Both Pettus Read and Marvin Whitworth are Alumni of the MTSU Ag School.

Each candidate was given five minutes to tell about themselves and their positions, but the evening got lively when Pettus Read started asking questions. Each candidate was asked a question, with a minute to reply, but all the candidates could offer a 30-second response. Differing opinions soon became obvious and the crowd joined in offering spirited applause and even some yells.

At the end, everyone who attended seemed pleased. One candidate noted that this was the largest forum they had seen during the campaign. Coverage was provided by two TV stations and was given front page coverage by Murfreesboro's Daily News Journal. Articles also appeared in the Nashville *Tennessean* and the Shelbyville *Times Gazette*.

Bottom line: Ten candidates faced a predominately agricultural crowd in a venue designed for Livestock events. The event was sponsored and organized by Agricultural groups. For the most part, the candidates had prepared well to discuss agriculturally related issues. When this race gets narrowed down, the candidates will know more about Agriculture and when a winner emerges, we will have a person in Washington who knows that Agriculture is important to the voters in the 6th District.



Ag Alum Marvin Whitworth welcomes over 300 people to the forum. Another Alum, Pettus Read (lower right), was the Master of Ceremonies.

Dual Credit Update 2009-2010

The dual credit program within the School of Agribusiness at Agriscience continues to show promising results. With two course offerings: Introduction to Ornamental Horticulture and Agribusiness: Fundamentals and Applications, a student has the opportunity to earn 6 hours of college at MTSU while still in high school. 154 students from 16 counties sought credit for the 2009-2010 term. The ABAS department is currently working on the approval to add a third course offering: Leadership. The MTSU unique dual credit design has become a model for other universities.

Got Chocolate Milk?



photo by News and Public Affairs

BUILDING STRONG COWGIRLS— Young visitors to the Tennessee Livestock Center enjoy chocolate milk provided July 5-8 by the MTSU Dairy Barn and Milk Processing Plant during the 39th Tennessee Junior Livestock Exposition. At left, Kendall Garrell, 11, a fifth-grader at Cornersville Elementary School, takes a healthy sip fresh from the cooler.

If you need our assistance or want to send us a note, please send to wgill@mtsu.edu or check our WEB page: <http://www.mtsu.edu/abas/>

ABAS Faculty

Dr. Warren Gill, Director and Professor of MTSU School of ABAS
Dr. Warren Anderson, Professor of Soil Science
Ms. Anne Brzezicki, Instructor, Horsemanship and Equitation
Dr. Jessica Gentry Carter, Associate Professor of Animal Science
Dr. Kevin Downs, Associate Professor of Animal Science
Dr. Justin Gardner, Assistant Professor of Agribusiness
Dr. John Haffner, D.V.M., Clinical Specialist in Equine Repro and Wellness
Dr. Rhonda Hoffman, Associate Professor of Animal Science (Equine)
Dr. Tony Johnston, Professor of Agribusiness
Dr. Patrick Kayser, Clinical Specialist in Equine Health
Ms. Alanna Neely, Instructor of Dual Credit programs
Dr. Nate Phillips, Assistant Professor of Horticulture
Mr. Tim Redd, Director, Farm Laboratories
Dr. S. Cliff Ricketts, Professor of Agricultural Education
Dr. Dave Whitaker, Director, Horse Science

ABAS Staff

Mr. Daniel Boyer, Beef & Swine Unit Manager
Mr. Jeremy Carlton, Assistant Horse Barn Manager
Ms. Renee Dunn, Horse Science Secretary
Ms. Jessica Schultz, Horse Science Center Barn Manager
Mr. Ralph Smith, Dairy Assistant
Ms. Kym Stricklin, Executive Aide, School of ABAS
Mr. Jason Tanner, Dairy Manager
Mr. Danny Troup, Crops Unit Manager
Ms. Liz Troup, Milk Processing Plant Manager