



## Alumni:

Well, it is that time of year again where we take stock of the past year and share with you, our Alumni, what we have been up to. It has been a difficult year for the students and faculty with the passing of Dr. David Coffey. His life lessons and good humor will be missed by all. Our own Dr. Gray turned 80 this past Spring and we celebrated at EST, catching him completely off guard.

We gave out more than \$50,000 in scholarships to new and returning students. We are also very pleased to have as new faculty members Dr. Dominique Gumirakiza (Ag Econ) and Mr. Hunter Galloway (Animal Science). We are looking forward to their contributions and fresh insights.

The University Farm continues to look better and better, some rain always helps. Our corn has suffered due to lack of rain, but the soybeans and hay appear to be respectable. We have the foundations ready for two new Quonsets, one for the mulch site (equipment storage) and one for the dairy (hay storage). Our honey bees cannot keep up with the demand. The dry weather was tough on the row crops but was great for our vineyard. If you have not seen the vineyard and gardens by the Expo, you are really missing a treat.

Please come to our Homecoming Brunch and visit our tent behind the Floral Shop on Campus during Homecoming 2014. I hope you enjoy the newsletter.

All my best,  
 Jack L. Rudolph, Jr.  
 Department Head



## In Memory of Dr. David M. Coffey

Dr. David McMillan Coffey passed away on Thursday, March 20, 2014, after a brief illness. He is survived by his mother, Lois Coffey; dear friend, Dr. Luis Samayoa; brothers, Danny (Jane) and Daryl (Debra); sisters, Ann Coffey (Steve Dahmer) and Pam Coffey Wells (Tom); and numerous nieces, nephews, cousins, family and friends.

Dr. Coffey was a much-beloved professor, an avid traveler, and an inspiration to scores of students. Born February 17, 1950, to J.D. and Lois Coffey, he spent his formative years on a farm in Cumberland County, near Burkesville. He earned his bachelor's and master's degrees at Western Kentucky University and his doctorate at Virginia Tech in 1978. Soon after, he returned to WKU and the Department of Agriculture in Bowling Green and made his home in a lovely old house near the University, walking to work every day.

Hundreds of students and faculty were transformed by visits with Dr. Coffey to Costa Rica, Argentina, Australia and Ecuador. Dr. Coffey was especially fond of Ecuador and the Ecuadorian people, travelling there with students at least 27 times since 1992. Indeed, David Coffey touched many lives. He embraced the diversity in individuals. He challenged those around him to think in fresh new ways. He will be remembered for his contributions to Agriculture Education in the state of Kentucky, for his support of diversity, for his work with the Kentucky-Ecuador Partners of the Americas, and for his kindness and generosity. The faculty, staff, students and alumni of Western Kentucky University and the WKU Department of Agriculture sadly miss his presence, his humor, and his influence.

*Contributions in memory of him can be made to the Dr. David Coffey Scholarship Fund, c/o College Heights Foundation, 1906 College Heights Boulevard 41016, Bowling Green, KY 42101.*

Submitted by: Dr. Linda Brown Gonzales



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## 2013 - 2014 Outstanding Agriculture Students



The Elmer Gray Outstanding Graduate Student Award  
**Denise Anderson**  
Bowling Green, KY



The Elmer Gray Outstanding Graduate Student Award  
**Yao Xue**  
Zhengzhou, Henan, China



Outstanding Senior and Outstanding Horticulture Student  
**Clarice Esch**  
Somerset, KY



Outstanding Agricultural Education Student  
**Rebecca Kate Royse**  
Columbia, KY



Outstanding Agricultural Business Student  
**Lee Edwards**  
Somerset, KY



Outstanding Student in Agronomy  
**Joshua Dennis**  
Upton, KY



Outstanding Student in Agronomy  
**Brad Mattingly**  
Springfield, KY



Outstanding Animal Science Student  
**Adam Blessinger**  
Huntingburg, IN



Outstanding Turfgrass Management Student  
**Jerry Edmonds**  
Franklin, WI

Photos Courtesy of Monica Bean, Ogden College of Science & Engineering Dean's Office

## J Dominique Gumirakiza- Assistant Professor of Agricultural Economics



J Dominique Gumirakiza obtained both his Masters' and PhD degrees from Utah State University in 2010 and 2013 respectively. He specialized in Agricultural Economics. He has 4 years of teaching experience. His research and outreach interests are in local food production, agribusiness marketing, and sales mostly at farmers' markets and community supported agriculture programs. As a faculty in the Department of Agriculture here at WKU, Dr. Gumirakiza focuses on agricultural marketing, sales and services, and agribusiness entrepreneurship. Prior to joining our faculty team, Dr. Gumirakiza was a faculty at Brigham Young University (BYU)-Idaho, Department of Economics. He taught Principles of Microeconomics, and Principles of Macroeconomics. He also worked at Idaho State University as an adjunct professor of economics teaching both face-to-face and online courses. Dr. Gumirakiza is certified by the Quality Matters (QM) as an online course peer reviewer. His

teaching style is student-centered and encourages the teach-one-another participatory learning process. He facilitates students to relate economic concepts to their daily life situations and stimulate research interests in current economic issues happening in their surroundings. He provides classroom activities that allow students to interact, learn from and teach one another, and identify opportunities to apply their acquired knowledge outside the classroom.

# Students from the Department of Agriculture Study Developmental Issues in Andean Agriculture in Ecuador



WKU Department of Agriculture carries on a 22 year tradition of visiting the Highlands of Ecuador to study rural development and agriculture production issues with their Spring Break 2014 trip to South America. Pictured are Martin Cobo, farmer and dairyman hosting the group in Pillaro; Dennis Williams, student; Dr. Linda Brown Gonzales, Leader from the Department of Agriculture; Travis Combs, student; Tori Christensen, student; Jody Dahmer, student; Austin Cole, student; Lauren Harris, student; Katherine Settle, student; Jessie Key, student; Dr. Melissa Stewart, Leader from the Department of Modern Languages; Savannah Claywell, student; Dr. Jose Martinez, Veterinarian and host in Ambato and Puyo; and Ricardo Cobo, farmer and dairyman host in Pillaro. The student in the back is Nicholas Christman; the student in the front is Lydia Richardson. This picture was taken on the Cobo farm in Pillaro, Ecuador.

During the time of spring break from coursework, eleven WKU students and two professors headed south to Ecuador to study the rural development issues and agricultural production that occurs in that country. Located right on the equator, Ecuador has a diverse population and varied microclimates throughout the Andes and in to the upper Amazon River basin. Students toured the flower production facilities of Esmeralda, Inc., a livestock market, flower markets, farmers markets and farms for potatoes, tree tomatoes, dairy and beef. They visited with renowned Ecuadorian artist Enrique Alvarez, Quito cultural historian Wilson Ruiz, and entho-botanist Miguel Castanel. Talking with local educational, political and business professionals, as well as with the general workforce, gave the students significant exposure to global food and development issues.

Dr. David Coffey, who died in March, started this course and has been responsible for exposing hundreds of students to that country. In honor of Dr. Coffey, Dr. Gonzales will be carrying on the tradition.

Submitted by: Dr. Linda Brown Gonzales



In May members of the Horticulture Club toured Chanticleer Gardens in Philadelphia and Longwood Gardens in Kennett Square, PA. They were privileged to get a private tour of both gardens. Then, they explored the National Mall in Washington D.C. for a few days including the U.S. National Botanic Garden. Their trip was paid for by fundraisers that included selling poinsettias and roses at the appropriate holiday. Pictured at Chanticleer are bottom row left to right, Dale Adams, Bill Thomas, director, Martin Stone, top row Laramie Stone, Nick Eadens, Joleen Stone, Suzanne Ince, Corinn Sprigler, Lindsey Humphrey, Linda Cruz.

Submitted by: Dr. Martin Stone



Clarice Esch, the outstanding Agriculture student for 2014, was awarded the prestigious Fulbright Scholarship to Costa Rica in August. She wrote her research proposal while a student at WKU and will take leave of her doctoral studies at Michigan State for one year to pursue this research. We are proud of her as one of our own and wish her only the best on her endeavors in the cloud forest.

Submitted by: Dr. Martin Stone



In May Clarice Esch and Dr. Martin Stone travelled to Costa Rica on a grant where they taught local native producers how to graft tomatoes. The farmers live above 5000' in the cloud forest where little soil is available and a disease in the soil can be devastating. They taught a dozen Ticos (natives) and a few gringos the techniques. The last word was that most of the plants were still alive and producing disease-free tomatoes.

Submitted by: Dr. Martin Stone

## Viticulture News

The past year has been another busy and productive one for the WKU Viticulture program. Vineyard Manager Ryan Phelps along with undergraduate student employees produced an excellent crop for the second consecutive year. Most of our wine grapes were marketed to Crocker Family Winery of Franklin, KY, and our seedless grapes were sold at farmer's markets and at the WKU Floral Shop. For the first time, grape juices and jellies were produced from WKU grapes via an offsite commercial kitchen. We marketed both grape jelly and purple grape juice made from Concord and Niagara varieties and a white grape juice made from the variety Villard Blanc.

2014 vineyard activities began with dormant pruning in March and April; the vineyards were again utilized to train students enrolled in the introductory Viticulture class in pruning and shoot thinning techniques.

Additionally, the class assisted with planting our newest vineyard comprised of 200 seedless varieties, including 'Glenora', and 'Somerset'. Three sections of our Summer Vineyard Operations course were offered this year. This is a hands-on learning course where students participate in a variety of activities such as canopy management and netting for bird management. Ryan is ably assisted this year by undergraduate assistants Andrew Wurth, Eva Ross, and Mitchell Lyons. Despite the dry weather, we expect another good yield for the 2014 crop.



We encourage you to stop by the vineyards for a visit; they are located just south of the L.D. Brown Agricultural Exposition Center. Call (270) 745-3151 or email [todd.willian@wku.edu](mailto:todd.willian@wku.edu) or [ryan.phelps@wku.edu](mailto:ryan.phelps@wku.edu) to schedule a visit!

Submitted by: Dr. Todd Willian

## Turfgrass Management News

Those of you familiar with turf know that winterkill was the major topic in the industry this year. Luckily, we did not see any winterkill on the fairways at the University Farm. However, there were several reports of winterkill in and around Bowling Green. This winter was an excellent winter for a research project looking at nitrogen rates and traffic rates on first year survivability of newly established bermudagrass. To basically summarize our findings, all bermudagrass treatments that received three traffic events (simulated football games) per week resulted in severe

winterkill. Also, high nitrogen rates increased winterkill. Finally, Riviera, and Latitude 36 had less winterkill than Tifway 419 bermudagrass.

Other turf research being conducted at the University Farm includes evaluation of a new turf herbicide, topramazone (Pylex). Justin Duckworth, a M.S. student from Webster County, is looking at this product's effects on selective control of bermudagrass in tall fescue turf. Results from his first year's work are promising. Other ongoing research is looking at using tobacco

proteins for a biological control for spring dead spot in bermudagrass. This is a cooperative study with the University of Kentucky. Finally, we are also evaluating a portable colorimeter's ability to measure turf color, quality, and cover.

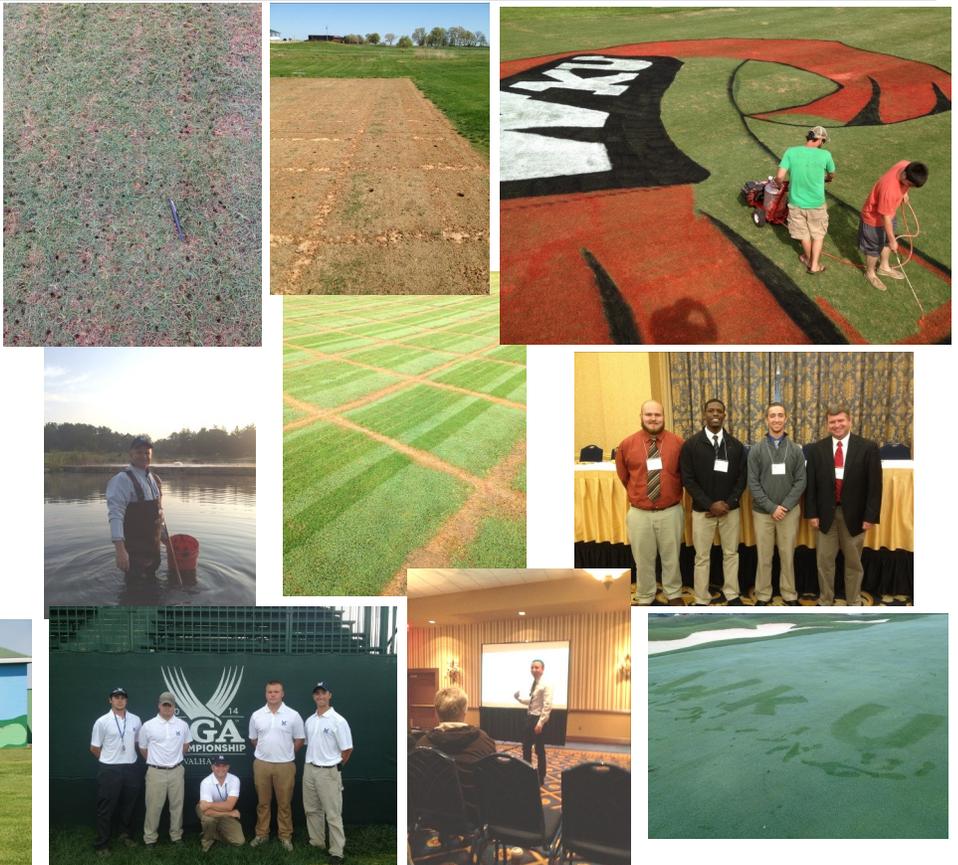
Our students continue to excel. Three students received scholarships from the Kentucky Turfgrass Council: Tyler Sadler, Jerry Edmonds, and Luke Headley. Also, WKU played a role in this year's PGA Championship at Valhalla C.C. in Louisville, KY. Luke Headley, Blake Dewsnap, and Doug

# Turfgrass Management News Continued

Dunleavy worked at Valhalla all summer as interns. Sean Konsavich and I joined these three students as volunteers during the PGA. I spent most of my efforts cleaning out the water features (where the old professor couldn't mess anything up) while my students mowed greens, tees, and performed other more critical tasks. As usual, it wouldn't be Valhalla if it didn't rain. The tournament winner, Rory Mclroy did autograph a squeegee for the staff. What a great week and what an exciting tournament!

I hope to see you at Homecoming 2014 and as always, GO TOPS!

Paul Woosley



## Internships at the Baker Arboretum

We would like to share the many experiences we had during our internship at the Baker Arboretum.

First, we learned about plant hydration and personal safety measures which lead to the proper use and techniques of hand and power tools and equipment operation. From there, we learned how to safely apply pesticides and about nutrient management.

Secondly, we have utilized plant taxonomy with the trees, shrubs, native plants, invasive species, and weeds. Also which plants are butterfly, fowl, and wildlife hosts. And, as a bonus, Mr. Jake Osborne has been teaching us how to raise bees for pollination purposes and honey production.

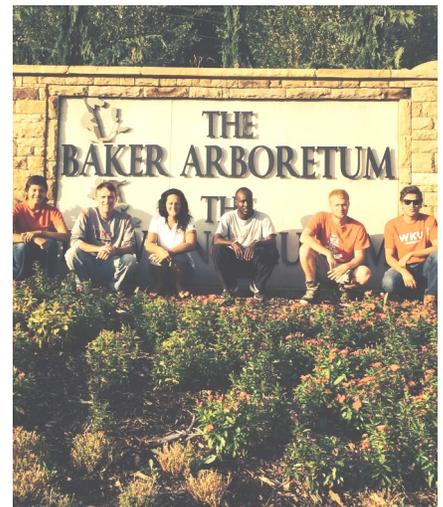
Next, we learned how to design and plant landscape beds and how to incorporate edibles aesthetically. We went on to amend soil and mulch. We

were also taught how to propagate, graft, prune, dry flowers, implement cold frame production and how to create and use a drip irrigation system. Also, we were taught how to care for lawn and turf.

Finally, we learned how to work as a team to accomplish various projects, solve issues that arise, and prevent future problems from occurring. Most importantly, Mr. Rickman Freeman has inspired us to be passionate about our chosen career and to be the best that we can be.

We would like to express our gratitude to Mr. Jerry Ellis Baker for both the honor and privilege of being able to learn as we work in paradise. We thank Dr. Martin Stone and the staff for allowing us to learn and make mistakes as we put our teaching into practical application.

Submitted by: Dennis Williams



From left to right:  
Linda Cruz, Carrollton, Kentucky  
Dennis Williams, Bowling Green, Kentucky  
Jennifer K. Tracy, Bowling Green, Kentucky  
Titus Tirop, Kenya, Africa  
Zach Yoakem, Bowling Green, Kentucky  
Heins Velastegui, Ecuador

## Southern Forages Authors Visit WKU

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Pictured above are Dr. Don Ball, Dr. Carl Hoveland, and Dr. Garry Lacefield, authors of many books and research papers on forages and their production and utilization. Here they are holding the books they have given to the Owsley Alumni Library at the Western Kentucky University Augenstein Alumni Center. (Photo by Clinton Lewis)

On February 21, 2014, the authors of the *Southern Forages* book visited Western Kentucky University and the Department of Agriculture. Two of the authors, Drs. Don Ball and Garry Lacefield, are native Kentuckians, WKU alumni, and members of the WKU Hall of Distinguished Alumni. Dr. Ball is retired from Auburn University as an Extension Service Forage Specialist. Dr. Lacefield is retiring from the University of Kentucky as their Extension Service Forage Specialist. The third author, Dr. Carl Hoveland, is a native of Wisconsin and has had a distinguished career in forage research at both Auburn University in Alabama and the University of Georgia. He is Professor Emeritus and resides in Athens, Georgia.

These three scientists have been the leading authorities on forage crops for many years and are internationally known experts in the field.

The central event of their visit was the seminar they presented to a gathering of students, faculty, staff, and alumni. The seminar topic was "Ten Keys to Profitable Forage Production." Each of the authors participated in presenting and answering questions from the audience. In addition, Drs. Ball, Lacefield, and Hoveland visited the WKU Owsley Alumni Library where they presented a signed copy of their recently released Spanish translation of *Southern Forages* to the University, *Forrajes de Las Americas*. The *Southern Forages* book has been translated into Chinese, Turkish and Czech as well.

These gentlemen met with Dr. Cheryl Stevens, Dean of Ogden College, at breakfast; then they were given a tour of the WKU campus by Dr. Linda Brown Gonzales, visiting the Civil War trenches at the top of the Hill, the Colonnade, the statues of Henry Hardin Cherry and E. A. Diddle, and viewing the various buildings and athletic fields. They stopped in the WKU Floral Design Shop to visit with Mr. Roger Dennis, floriculturalist, where they saw how students can develop their floral design skills and become experienced at flower shop management at this facility. The final stop on their tour was in the Department of Agriculture in the Environmental Science and Technology Building where they toured the department; met faculty, staff and students; and then presented their seminar. Their visit culminated with a late lunch at a local restaurant where alumni Casey Flanders, graduate student Ken Johnson, and guest Karen Johnson joined the group for continued forage discussion and visiting. This was a historic occasion and a distinct honor to have all of the authors of *Southern Forages* address the WKU Department of Agriculture.

Submitted by: Dr. Linda Brown Gonzales

## Career Day- October 28, 2014

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The Department of Agriculture will be hosting a Fall Career Day on Tuesday, October 28th from 9:00 a.m. to 1:00 p.m. If you are interested in setting up a booth, please contact Dr. Todd Willian at (270) 745-5969 or [todd.willian@wku.edu](mailto:todd.willian@wku.edu).

# 2014-2015 Agricultural Ambassadors



**Ashley Cottrell**  
Agricultural Education  
Magnolia, KY



**Dylan Gipson**  
Agricultural Education  
Sonora, KY



**Mikayla Grider**  
Animal Science, Pre-Vet  
Mount Herman, KY



**Luke Headley**  
Turfgrass Management  
Hudsonville, MI



**Lindsay Ratliff**  
Agribusiness  
Frankfort, KY



**Rachel Schmitt**  
Animal Science  
Tipton, IN



**Molley Scott**  
Animal Science  
Munfordville, KY



**Tara Watkins**  
Agronomy  
Frankfort, KY



*Photos Courtesy of Clinton Lewis, University Photographer*

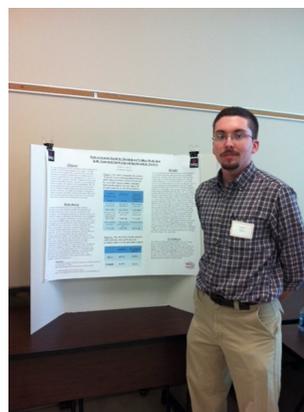
## Agricultural Education

The agricultural education program continues to make changes to reflect a more progressive educational system that is changing within the Commonwealth. Students are being asked to complete more requirements in their undergraduate program than ever before. With the addition of new courses and stream lining the degree program, students will be able to work their way through the discipline and become prepared professionals ready to step into the classroom. The formation of the Agricultural Education Society has assisted in our new changes in their pre-service program. The formation of the group has led to many benefits in communication with students in AgEd and with students in other disciplines. The group has been active in traveling to meetings, working on research, and staying up to date on all the new changes in Kentucky AgEd.

Submitted by: Dr. Thomas Kingery



The AES and future Agricultural Educators pose for a picture in Frankfort after their morning session with Kentucky Team AgEd.



Loren Gross competing in the WKU Student Research Conference.



Spring 2014 AgEd graduates Haley Bryant, Hannah Simmons, Katie Roysse, and Ryan Ritter pose with Big Red after their AES banquet.

# *Agriculture Students Striving for Effective Tomorrows (ASSET) Conference*

WKU's Department of Agriculture hosted 27 students at the ASSET (Agriculture Students Striving for Effective Tomorrows) Conference June 15-19, 2014. The five-day conference is designed for students who have completed their junior year of high school and are interested in attending college and studying agriculture. The conference focused on activities that consist of leadership, communication and social development; making the most of a college experience; and created awareness of the opportunities within the agriculture industry. Activities included visiting Whiskers Catfish Farm, the WKU Art Department, learning problem-solving skills at the WKU Challenge Course, and completing a community service project at Weldon Peete Park.

ASSET Counselors included: Molley Scott (Head Counselor), Munfordville, KY; Ashley Cottrell, Magnolia, KY; Dylan Gipson, Sonora, KY; Mikayla Grider, Tompkinsville, KY; Keith Reesor, Cecilia, KY; Jared Scott, Sparta, KY; Alexis Skaggs, Rineyville, KY; Bryan Smith, Springfield, KY; and Eden Tharpe, Elizabethtown, KY.

ASSET participants: Marie Bezold, Moscow, OH; Brittany Brangers, Cecilia, KY; Taylor Brooks, Glendale, KY; Tori Carter, Salvisa, KY; Suzanna Cooke, Owenton, KY; Turner Cottrell, Magnolia, KY; Wesley Estes, Auburn, KY; Felicia Hornback, Hodgenville, KY; Bradley James, Sturgis, KY; Erin Masterson, Sonora, KY; Jo Lynne May, Franklin, KY; Julia McClain, Georgetown, KY; Tiffany Ngo, Louisville, KY; Anthony Osbourne, Springfield, KY; Craig Powell, Big Clifty, KY; Julie Redding, West Lafayette, IN; Tatiana Rogers, Rineyville, KY; Clayton Ryan, Rineyville, KY; Sydney Sabash, Clarksville, TN; Hannah Sharp, Big Clifty, KY; Nicholas Stuart, Lewisburg, KY; Blake Thomas, Loretto, KY; Kodi Thompson, Tompkinsville, KY; Jonathan Vinson, Rockfield, KY; Amber Walters, Bonnieville, KY; Casey Whitlock, Campbellsville, KY; and Taylor Worthington, Harrodsburg, KY.



*If you have a high school junior or know of one that might be interested, please contact the Agriculture Department ([agriculture@wku.edu](mailto:agriculture@wku.edu) or [www.wku.edu/agriculture](http://www.wku.edu/agriculture)) and we will make sure that the student receives an application.*

## *WKU Dairy Challenge Team participates in 8th Annual Southern Regional Intercollegiate Dairy Challenge® Contest*

Baton Rouge, LA, November 17-19th, 2013 – Members of the WKU Dairy Challenge Team traveled to Louisiana State University in Baton Rouge, LA during fall semester to participate in the 8th Annual Southern Regional Intercollegiate Dairy Challenge® Contest. The WKU team was comprised of five students; Adam Blessinger, Holly Burnette, Kim Pierce, Audrey Stephens, and Holly Young; Dr. Fred DeGraves, Department of Agriculture, provided coaching support. The contest attracted 51 students from Alabama A&M, Clemson, Eastern Kentucky University, University of Florida, University of Georgia, University of Kentucky, Mississippi State, North Carolina A&T, North Carolina State University, Virginia Tech, and WKU. Louisiana State University hosted the competition.

The two-day competition provided a unique opportunity for students to develop team building, critical thinking, problem solving, public speaking, and dairy herd management skills. Upon arriving in Baton Rouge, the team received extensive records from the Champlin Dairy Farm, owned by Clifford and Patty Champlin of Loranger, LA. The following day was spent reviewing the actual farming operation and interviewing the farm management group. Teams were then isolated from outside contact to develop recommendations for improving the function and profitability of the operation.

Recommendations for nutrition, reproduction, milk quality, milking procedures, herd health, housing, and farm economics were developed into a formal presentation. On the following day, their recommendations were formally presented to a panel of five judges, each of which was recognized as an expert within the dairy industry.

Congratulations to the entire WKU Dairy Challenge Team for their remarkable performance. Virginia Tech was the only university that attended the challenge to take home more 1st and 2nd place certificates. The Dairy Challenge Team provided numerous helpful suggestions to improve the dairy operation. WKU Dairy Challenge team members agreed that the Annual Southern Region Intercollegiate Dairy Challenge® was an exceptional experience and were grateful for the opportunity to develop dairy management skills in an intense and competitive environment, using information collected from a working dairy under actual farm conditions.

Submitted by: Dr. Fred DeGraves



WKU Dairy Challenge team members: Dr. Fred DeGraves (coach), Holly Young, Adam Blessinger, Holly Burnette, Audrey Stephens, and Kim Pierce.



Congratulations to WKU Challenge Contest certificate winners: Holly Burnette (2<sup>nd</sup> place), Kim Pierce (1<sup>st</sup> place), and Audrey Stephens (2<sup>nd</sup> place).

## *Mr. Hunter Galloway- Visiting Assistant Professor of Animal Science*



Hunter Galloway is one of the two new faculty members in the WKU Department of Agriculture. Hunter grew up in South Fulton, TN on a small cow/calf operation. Through high school, he worked as a veterinary assistant. Hunter was also very active in FFA, serving as chapter president his senior year. He earned his bachelor's degree in Animal Science at the University of Tennessee at Martin. While at UTM, Hunter continued to work as a veterinary assistant and became involved in collegiate FFA. He also became a member of Alpha Gamma Rho fraternity. Hunter decided to continue his education by pursuing a master's in Animal Science with a concentration in Meat Science at West Texas A&M University. While at WTAMU, he was employed by the Beef Carcass Research Center. Through the research center, Hunter was involved in beef carcass data collection in major beef harvest facilities in both the United States and Canada. His master's degree research looked at methods to conserve water during the beef harvest process. Hunter then moved to the University of Illinois to pursue a PhD in Animal Science with a concentration in Meat Science. While at the University of Illinois, Hunter continued his involvement in large-scale beef research throughout the country. Hunter's PhD research investigated the effects that limit feeding cattle had on meat tenderness. Hunter is looking forward to continuing

research in beef cattle production and becoming involved in Kentucky beef production. He currently resides in Bowling Green, Kentucky with his wife, Leanne and their two Labrador Retrievers, Bear and Buck.

## *Student Research- Assessment of Stress in Therapy Horses*

WKU Honors College Agriculture major Leah Catherine Turner and graduate student Denise Anderson presented posters at the 2014 Student Research Conference, held on March 22 at Gary Ransdell Hall. Their research, conducted under the direction of Dr. Petra Collyer and funded by a FUSE grant awarded to Turner, involves assessment of stress in therapy horses.

Anderson's poster, "Comparing objective and subjective evaluations of equine stress levels in the therapeutic riding environment," won an award in the graduate poster section. Provost Dr. Gordon Emslie selected Turner's "Assessment of horses for therapeutic riding purposes: comparison of physiological and behavioral parameters," for a special presentation to the WKU Board of Regents.

With the cooperation of Bowling Green's New Beginnings Therapeutic Riding, the team measured physiological stress indicators (salivary cortisol and heart rate/heart rate variability) and developed an ethogram of equine behaviors. Horses were monitored during riding lessons and in test situations designed to examine responses to social separation, novel objects and novel handling situation. Additionally, handlers familiar with the horses completed questionnaires concerning the animals' behavior and temperament.

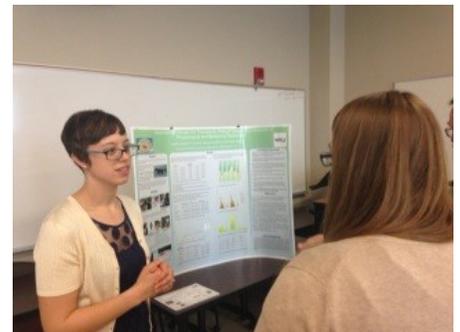
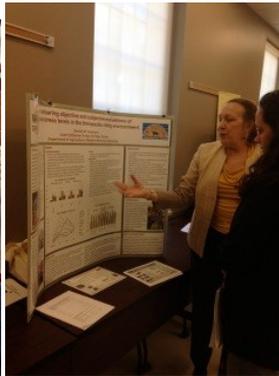
The team found wide variation in stress response and behavior among the horses at the center, as well as between handlers in their evaluations of horses' character traits.

This research is expected to help develop ways to improve selection and training of horses for use in equine-assisted therapies, reduce animal wastage and stress, and bolster program effectiveness.

Anderson and Turner also submitted their posters for presentation at the 10th International Society for Equitation Science Conference being held in Denmark this summer.

Since 1970, the annual Student Research Conference has showcased the scholarly activities of graduate and undergraduate students of diverse disciplines from WKU's main and regional campuses. The conference provides opportunities for students to present talks, performances and posters about their research.

Submitted by: Denise Anderson



## *Dr. David Coffey*

David Coffey was a valuable mentor to me when I arrived on campus in the fall of 2003. He introduced me to Mr. Jerry Baker and Mr. Mitchell Leichhardt, key people that would become important to me a few years later — but I did not know that at the time. I learned that when David asked me 'how's it going, my man' in the hallway, he did not really want to know the answer — it was his way of saying hello and no more. I was fortunate to help him take a class of students to Ecuador on an adventure a couple of years ago. We saw Quito, the Amazon, and spent a hot but enjoyable week on the island of Isabella in the Galapagos Islands with students. David thrived on adventures with students, and I saw him in action. He was very, very good. David mentored hundreds of students and a few faculty of which I was lucky to be one. I'm not the only one to feel his absence especially as we began the semester. This picture was taken in town of Tena in the Amazon on our trip January 2013. Muy Muy Laid Back...



Submitted by: Dr. Martin Stone

# Agronomy News

## Student News

Dan Daly, Josh Dennis, Seth Haddock, Brad Mattingly, William Price, Ben Ryan, John Scarpa, and Bryan Smith participated in the 2013 Southern Regional Soil Judging Competition, which was hosted by Tennessee Tech University, Cookeville. Darwin Newton and Becky Gilfillen went with the group as coaches. Seth Haddock, Brad Mattingly, John Scarpa and Bryan Smith also competed in the NACTA Soil Judging Contest hosted by Northwest Missouri State University in April 2014.

Josh Dennis and Brad Mattingly were the Outstanding Senior Agronomy Science Students this year. Josh graduated last fall and Brad graduated last spring from WKU with a concentration in Agronomy-Plant Science.

In the fall, the Soil Fertility Class and the Agronomy Club had a field trip to Crop Protection Services and Waters Agricultural Laboratory in Owensboro. We appreciate all the support from our local Agricultural Industries and the time they take out of their busy schedules to provide tours. We're excited about a new educational partnership between United Soils Inc. (USI) and the WKU Department of Agriculture. USI is providing a variety of precision agriculture services including soil sampling and analysis, precision ag field demonstrations for our students, and GIS software field mapping.



## Research

The Agronomy Faculty continues to focus on research in the area of Waste Management in cooperation with the USDA-ARS unit located at the WKU Farm. We are assisted in our efforts by undergraduate student Ashane Netthisinghe and graduate student Justin Duckworth. We are continuing the two studies that began in 2011. One study investigates microbe survival in soil and fescue after poultry litter, dairy manure or inorganic fertilizer applications. Information about soil nutrient accumulation and fescue yields will also be determined in order to facilitate information between the studies. Our second project examines nutrient accumulation under a feedlot setting. The hopes of this project are to determine where excess nutrients from the field lot are accumulating and being released. Last fall, both projects underwent change to enter a remediation process to look at faster removal of soil nutrients. Dr. Annesly Netthisinghe has been the principal investigator on this project and has used his expertise in GPS to allow a geo-spatial understanding of nutrient movement. Other research projects include the use of poultry litter and dairy manure as a fertilizer source to grow field and forage crops. Drs. Becky Gilfillen, Annesly Netthisinghe, and Paul Woosley presented papers at the International American Society of Agronomy Meetings in Tampa, FL. Dr. Becky Gilfillen also made a presentation at the Southern American Society of Agronomy Meetings in Dallas, TX.



Dr. Elmer Gray continues to lead a number of field research projects, the majority of which are located at the WKU AREC. Among Dr. Gray's numerous trials are continued investigations into baby corn production and sunflowers for cut-flower production. Dr. Gray was awarded the Garry Lacefield Public Service Award at the 34th Kentucky Alfalfa Conference held February 20, 2014 at the WKU L.D. Brown Agricultural Exposition Center. Congratulations Dr. Gray!

Dr. Linda Gonzales continues to be very active in providing domestic and international travel experiences for our students. She has recently began a research project that investigates hot pepper production in Kentucky. Six varieties of chili peppers were established, ranging in 'heat' from 250,000 to 2,000,000 Scoville Heat Units (SHU). For comparison, jalapenos are usually 5,000 SHU's so these peppers are hot! Varieties are being evaluated for germination percentage, early season vigor, and yield.

Dr. Todd Willian is participating in a field experiment funded by Syngenta and supported by Wheat Tech which evaluates early maturing corn hybrids for the mid-south region. Additionally, Dr. Willian established a field corn experiment that evaluates a soon-to-be registered Syngenta herbicide called Acuron™. Dr. Willian is also, along with Dr. Paul Woosley, participating in 3 research projects that evaluate industrial hemp production. These experiments will provide fiber yield, seed yield and nitrogen rate response information for the 13 varieties of hemp planted in early June.

Prepared by: Dr. Becky Gilfillen & Dr. Todd Willian



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### HOLIDAY OPEN HOUSE:

**Saturday, November 8: 9:00 a.m.-4:00 p.m.**

**Saturday, November 15: 9:00 a.m.-4:00 p.m.**

## Alumni Homecoming Brunch

Saturday, November 8, 2014  
10:00 a.m.

AG EXPO CENTER

Please call (270) 745-3151 or email [lindsay.meeks@wku.edu](mailto:lindsay.meeks@wku.edu) to RSVP by October 29.

Tickets \$15

## Tailgating at the WKU Floral Shop

12:30 p.m.

Everyone is invited!