

Alumni:

Many Thanks to Dr. Linda Brown,

Linda Brown's love of agriculture stemmed from her father, Ben Brown who retired from University of Kentucky's Cooperative Extension Service. Linda studied agronomy at the University of Kentucky before moving on to the University of Georgia for her graduate work in the field of forages. Dr. Brown has always had strong ties to Western Kentucky University. Her uncle, L. D. Brown, was an Agriculture Department Head and instrumental in receiving funds to build the L. D. Brown Agriculture Exposition Center. It was an easy choice for Dr. Brown to join the faculty when offered a position to teach forages and related plant science courses in 1988/89. Through hard work and dedication, she received tenure and promotion to associate professor in 1994. In 1999/2000, she was promoted to full professor and took the position of Assistant Dean of Ogden College of Science. She enjoyed her time in this position, but wished to return to teaching and rejoined the Agriculture Faculty in 2004. In 2014, the Agriculture Department Chair position became open. Dr. Brown accepted this leadership position and served until her retirement in 2017.



Dr. Brown was the first female faculty member in the Agriculture Department at WKU. Dr. Brown worked diligently to expose the field of agriculture to women. She was very active in the Women in Science & Engineering or W.I.S.E. Campaign. During her tenure at WKU, the Agriculture Department student body has moved from 10% female students to near 50% today.

Outside of Agriculture, Dr. Brown was very interested in leadership. She studied and taught leadership courses at WKU. These skills served her well in her roles as Assistant Dean and Agriculture Department Chair. Her skills have helped the Agriculture Department form stronger connections with stakeholders at WKU and throughout the region. Dr. Brown also possesses a love for travel. She initiated the Survey of U.S. Agriculture Course. This course has exposed students to many facets of agriculture from alligator farming in the south to cranberry production in the north. She also led many study abroad trips to South America and Europe. Through these efforts, she has exposed numerous students to agriculture opportunities outside the Commonwealth's borders.

The Agriculture Department and Community would like to thank Dr. Brown for all her efforts here at WKU and for the positive impact she has made on WKU Agriculture and its students. The Department wishes her all the best in her future endeavors.

Submitted by: Paul Woosley

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If you don't already receive the newsletter by email and you would like to, please send your e-mail address to:

agriculture@wku.edu

2016-2017 Outstanding Agriculture Students



The Elmer Gray Outstanding Graduate Student Award
Ashley Egan Blessinger
Lebanon Junction, KY



Outstanding Undergraduate Student
Tara Watkins
Frankfort, KY



Outstanding Agricultural Education Student
Thomas Poole
Auburn, KY



Outstanding Horticulture Student
Linda Cruz
Carrollton, KY



Outstanding Agricultural Business Student
Lindsay Ratliff
Frankfort, KY



Outstanding Student in Agronomy- Plant Science
Kirsten Banks
Lynchburg, OH



Outstanding Student in Agronomy- Soil Science
Perri Pedley
Owensboro, KY



Outstanding Animal Science Student
Steven Green
Munfordville, KY



Outstanding Floriculture Student
Megan Capps
Bowling Green, KY



Outstanding Turfgrass Science Student
Landon South
Alvaton, KY



Outstanding International Student
Huy Tran
Binh Duong Vietnam



The mural of the WKU Farm, painted by Barbara DeGraves, is in the Department of Agriculture's student lounge. Prints of the mural will be sold during Homecoming. Prints are unframed and are \$20 per print.

FUSE Grant Undergraduate Student Research

The FUSE Grant has provided answers to my curiosity of millennial consumers. This grant allowed me to explain the perception millennials have towards beef products and the industry as a whole and consumption patterns. It allowed comparison of the willingness to pay between rural and urban millennials in Kentucky. Results indicate that millennials have positive perception towards the beef industry and express significant willingness to continue consuming beef products in the future. Urban millennials are willing to pay more for beef products. This project is important for beef ranchers/processors and marketers. Processors can use results to better understand millennial perception towards beef production and can make better strides toward animal husbandry and enhance their practices from pasture to plate. Marketers in both urban and rural areas can better market beef products using the results they provide ranchers and marketers with crucial information to continue shaping the perceptions in a positive direction. This knowledge will further prepare myself and other beef producers for challenges ahead.

My experience with Dr. Gumirakiza and the FUSE Grant has been a true blessing. Dr. Gumirakiza has patiently guided me through the research process and been my cornerstone to finish the project. I have developed different skills and outlooks of thinking much needed in today's workforce. The FUSE Grant will be something I always refer to as it a bright light in my WKU career.

Steven Green

I conducted my research project on the Western Kentucky University AREC farm during Fall semester 2016. Obesity is a significant problem in horses, as in people; however, some owners find limiting feed difficult. Investigating ways to restrict calorie intake in horses is important for weight loss and a healthy metabolism. Six horses were used to determine the effect of feeding Teff hay on voluntary consumption rate and blood insulin and glucose concentration. Horses were offered 2.0 kg/100 kg BW of Teff or control (Ryegrass) hay daily in a crossover design. I found that feeding Teff hay results in a lower level of voluntary feed intake than Ryegrass hay, in addition to offering a lower calorie diet. The results are significant because they indicate horse owners may be able to feed Teff hay to achieve weight loss in their horses. Through my research project I not only gained knowledge in my field of interest, but also hands-on experience in equine research that will contribute greatly towards my career aspirations.

Applying my knowledge in a real-life setting and collaborating with a team of research assistants throughout my project, is an experience that will impact me as I continue my education and professional career. In May, I will be traveling to Minnesota to present my research project in an undergraduate student competition at the Equine Science Society Research Symposium.

Morgan Askins

Pictured from Left to Right:
(Dr. Dominique Gumirakiza
Steven Green, Morgan Askins
Dr. Jennifer Gill)



Agronomy

Student News

Kirsten Banks, Efrain Fonseca, Will Kemper, Travis Lewis, Perri Pedley, Zach Perry, and Dane Simmons participated in the 2016 Southern Regional Soil Judging Competition which was hosted by Auburn University. Darwin Newton and Becky Gilfillen went with the group as coaches. Kirsten Banks, Efrain Fonseca, Will Kemper, Perri Pedley, and Zach Perry, competed in the NACTA Soil Judging Contest hosted by Kansas State University in Manhattan, KS in April 2016. Congratulations to Zach Perry who finished as 5th place individual in this national contest. We also congratulate our Graduates of the team, this year, which include: Kirsten Banks, Travis Lewis, Will Kemper, Zach Perry and Dane Simmons. Kirsten Banks and Perri Pedley were the Outstanding Agronomy Science Students this year. Kirsten graduated this spring from WKU with a concentration in Agronomy-Plant Science and is currently employed by Wheat Tech. Perri is a Senior Agronomy-Soil Science student who will be completing her Bachelor's Degree this coming year. She has been a student intern with NRCS over the last two summers. In the fall, the Soil Fertility Class and the Agronomy Club had a field trip to Crop Production 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 and assist our students.

Research

Drs. Paul Woosley and Todd Willian, along with graduate student Robbie Anderson, are continuing to conduct research on industrial hemp. Our fourth year of hemp research includes hemp cultivar, nitrogen fertility, and weed control field trials. Robbie Anderson's thesis project examines both nitrogen rate and application timing effects, and effect of seeding method on crop emergence. Agronomy faculty are also continuing an experiment examining long-term effects (>10 years) of poultry litter and tillage vs. no-till effects on soil used for corn/soybean production. Dr. Annesly Netthisinghe attended and presented research at the American Society of Agronomy Meetings in Phoenix, AZ. Drs. Becky Gilfillen, Todd Willian, Paul Woosley, and graduate student Robbie Anderson attended the Southern American Society of Agronomy Meetings in Mobile, AL in February, 2017 where Robbie presented hemp research results in a poster format. Dr. Todd Willian recently presented hemp weed management research results at the Industrial Hemp Regulatory Conference held July 18-20 in Louisville, KY.

USDA- WKU Agriculture Cooperative Research

Drs. Paul Woosley, Annesly Netthisinghe, Becky Gilfillen, and Ms. Naomi Rowland (WKU Biology) have established a research project to investigate how *Clostridium botulinum* from applied poultry litter affects quality of alfalfa haylage. In addition, this research examines forage yield and quality of manure based alfalfa production.

Drs. Annesly Netthisinghe is working with Drs. Hunter Galloway (WKU /Animal Science) and Gatahun Agga (USDA-ARS Bowling Green) on a field research project to examine sustainability of row crop/cover crop/ beef grazing mixed systems for crop production, animal weight gains, and chemical and biological properties of soil.

Submitted by: Drs. Gilfillen, Willian, and Netthisinghe



2016 Regional Soil Judging
Participants



Hemp



Research



The Agricultural Education program has had another exciting year. The WKU AgEd program was recognized as a “Post-Secondary Program of Distinction” by the Kentucky Association of Career and Technical Education in 2016. It was an exciting award to receive from those within the profession and it was an honor to be recognized. Hopefully, this award had an influence on some students to attend WKU for AgEd as our concentration numbers have grown to exceed forty-five students for the Fall of 2017.

One of the many highlights from the year was the chance to serve as judges at the National FFA Agriculture Mechanics contest in Indianapolis, Indiana during the National FFA Convention. Thirteen WKU Agricultural Education students were charged to evaluate the high school teams on many areas of the contest. Some of the areas, included welding and fabrication, construction, engineering schematics and identification. Students were also available to examine the many educational vendors and gather contacts for acquiring teaching materials, supplies and textbooks as they continue to prepare for their teaching career.

Students also participated in the National TEACH AG day by participating in activities on campus. Students enrolled in the live web cast from NAAE and also promoted the day by handing out free popsicles to students in front of EST to promote Agricultural Education.

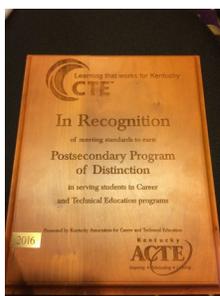
Another highlight of the year was the spring break travel trip. Students were given the opportunity to enroll in a course entitled Agricultural Education Explorations in America. WKU AgEd students were able to travel to Tennessee, Mississippi, and Louisiana to look at Agricultural Education programs and FFA Chapters that were Star chapters in their respective states. Chapters visited included, Munford High School, St. Amant High School, Ponchatoula High School, & Ruston High School and LSU. Students gained valuable teacher experience seeing the different approaches used by the teachers to train and educate their students. The course selections offered by the schools were different than the ones found in Kentucky. Aquaculture, STEM integration courses, and many certificate and training courses were available for students to enroll. They acting FFA advisors also gave them valuable tips for the first day of class and understanding “life balance” as an agricultural educator.

The final event for the school year was the AES banquet that was held in May and top individuals were rewarded for their efforts for the academic year. Elmer Gray, Professor Emeritus, was the keynote for the event. Leadership awards were presented to freshman, sophomores, juniors, and seniors and the senior future teachers were recognized as well. Award recipients were Zayne Priddy, Ben Benton, Emilee Graves, and Ashley Cottrell. Ashley Cottrell was our graduating teacher for Spring 2017 and Doug Witten for December 2016. Thomas Poole received the Ogden College Agricultural Education award.

AES students also participated in the State FFA Convention, ASSET, Kentucky FFA Leadership & Training Center Summer FFA Camp, and the State FFA welding contest during the summer.

The Agricultural Education Society has also started a scholarship for Agricultural Education students. It cannot be awarded until we meet the \$10,000 minimum. The pullover and vest sales each year are being used to meet our goal. Currently we have \$3,600 and our working to raise the remaining amount in the next few years. Contact any AES member for more information about assisting in the development of this fund.

For further correspondence please contact Dr. Kingery at thomas.kingery@wku.edu or 270-745-5966.



2017-2018 Agricultural Ambassadors



Morgan Askins
Animal Science
Rockfield, KY



Wesley Estes
Agriculture Education
Auburn, KY



Max Goldstein
Dietetics/Horticulture
Louisville, KY



Morgan Mason
Agriculture Business
Bowling Green, KY



Julia McClain
Animal Science
Georgetown, KY



Alexandra Palkovic
Animal Science
Thousand Oaks, CA



Meagan Walters
Agronomy-Plant Science
Bonnieville, KY



Sabrina Young
Animal Science
Sanders, KY



Flower Gardens at the WKU AREC . Planted by students in Mr. Roger Dennis' Commercial Floriculture Class and cared for by Students:

Kelly Eicher, Zach Brinkley and Wesley Estes.

Flower Gardens at WKU AREC



Hilltopper Creamery—Cheese

Hilltopper Creamery came online in April with much anticipated fanfare. Gary Beu was hired in January as the Artisan Cheese Maker for the Creamery. Gary had 12 years of cheese making experience in Alaska. He owned and operated his own dairy farm where he produced cheese until semi-retiring to Kentucky. His experience was essential in getting the Creamery fully operational and permitted. Initially, Hilltopper Creamery produced fresh cheddar curds for sale in four flavors: plain white cheddar, Cajun spice, garlic dill, and zesty Italian. Now, aged cheeses are available. These include mild white cheddar, pepper jack, and bacon cheddar. The Creamery also produces beer cheese made with College Heights Ale brewed on WKU's campus.

Currently, Hilltopper Creamery produces around 120 lbs. of cheese per week with hopes to increase production in the future. On average, 10 lbs. of milk are needed to produce 1 lb of cheese. Hilltopper Creamery has been averaging 1 lb of cheese produced for about every 9 lbs of milk. This is a testament to the quality of milk produced at the WKU Dairy. Cheese is currently being marketed to food services on WKU's campus and local farmers markets in Bowling Green. Online sales will be available in the near future. Additionally, cheese will be available along with other products produced at AREC at a future WKU Farm Store to be located at AREC. Other products available at this future location will be beef, vegetables, and grapes. The WKU Farm Store will be located in the Taylor Center next door to Hilltopper Creamery.

Hilltopper Creamery has been highlighted in videos by the Kentucky Department of Agriculture and "News from the Hill" segment broadcasted on WBKO news. Additionally, the Bowling Green Daily News featured the creamery in an article. You may inquire about purchasing cheese at 270-745-4361 or email hilltopper.creamery@wku.edu. An even better solution is to purchase your cheese when you attend homecoming festivities.

Submitted by: Paul Woosley



Agriculture Students Striving for Effective Tomorrows (ASSET) Conference

WKU's Department of Agriculture hosted 24 students at the ASSET (Agriculture Students Striving for Effective Tomorrows) Conference June 11-15, 2017. 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 Chaney's Dairy, touring the WKU Farm, learning problem-solving skills at the WKU Challenge Course, and participating in labs which covered topics including animal science, floral design, turf and golf management and electricity.

ASSET Counselors included **Wesley Estes** (Head Counselor), Auburn, KY; **Jacob Scott**, Sparta, KY; **Emilee Graves**, Springfield, KY; **Ben Benton**, Walton, KY; **Brionna Taylor**, Mt. Washington, KY,

ASSET participants included: **Katelynn Bunnell**, Horse Cave, KY; **Abigail Cross**, Elizabethtown, KY; **Amye Crump**, Paris, KY; **Shelbie Emmick**, Lewisport, KY; **Alexandria Hagerman**, Bowling Green, KY; **Nathan Helm**, Magnolia, KY; **Abbie Hodge**, Nancy, KY; **Chloe King**, Elizabethtown, KY; **Candace Logsdon**, Munfordville, KY; **Myah Meredith**, Hodgenville, KY; **Timothy Messer**, Mackville, KY; **Jessalyn Robey**, Adairville, KY; **Madeline Rugaard**, Nashville, TN; **Blake Ryan**, Rineyville, KY; **Brenton Ryan**, Rineyville, KY; **Mary Scott**, Munfordville, KY; **Susan Spinks**, Columbia, KY; **Brilee Tucker**, Edmonton, KY; **Kaitlin Tucker**, Elizabethtown, KY; **Kathryn VanHoose**, Marysville, OH; **Haley Varney**, Frankfort, KY; **Nicole Walters**, Bowling Green, KY; **Alexander Wheatly**, Frankfort, KY; **Shelby Winchell**, Hawesville, KY.



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



WKU President Caboni

WKU Agriculture Welcomes President Caboni

WKU Agriculture welcomed WKU's 10th president, Tim Caboni in July. President Caboni toured the Agriculture Research and Education Center. As a special welcome, the main entrance from Nashville Rd. was named Caboni Bend. President Caboni has knowledge in the agriculture field and is excited about promoting the department and AREC. He was extremely impressed with his tour of AREC and understands the role it plays in the education of the Department's students. He has already begun to work with Agriculture Faculty to broaden the Department's impact in the region, improve connection with stakeholders, and grow the department. Additionally, he has utilized products produced at AREC for events taking place on campus. The Agriculture Department is extremely excited about the future under President Caboni's leadership.



WKU Equine

A Horse Training class was held during the Summer Term from June 5th – June 30th. Guest speaker Dona Ruth, United States Dressage Federation bronze and silver medalist, visited to teach the students about Dressage riding.



Congratulations to Morgan Askins! She won 2nd place in the Undergraduate Student Research Competition at the 25th Equine Science Society Research Symposium in Minneapolis, MN, with her study, "Effect of feeding Teff hay on dry matter intake, digestible energy intake, and resting insulin/glucose concentration in horses."



WKU Farm News



The WKU Compost Facility located at AREC will begin composting food scraps from campus this year in a cooperative effort with WKU's Office of Sustainability. The Compost Facility currently composts all of the City of Bowling Green's leaves and animal manure produced at AREC. The finished compost product is sold to the public where it is utilized as a soil amendment for vegetable gardens and landscape beds. Proceeds from sales fund scholarships within the Agriculture Department. An industrial screener was purchased for the facility through a grant awarded to the Office of Sustainability. This screener will allow the facility to produce a more uniform trash free product.

Submitted by Paul Woosley

WKU Vineyard News

The past year has been another busy and productive one for the WKU Viticulture program. Most of our 2016 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 Design Training Center. Graduate Assistant Ryan Mairs has ably managed vineyard activities during the 2017 growing season; Ryan has been assisted by Undergraduate Assistant Tori Christensen since the beginning of July.

Vineyard research has focused upon fungal disease management. Ryan Mairs established field research in April that investigates *Bacillus mycooides* as a bio-activator to augment traditional fungicide applications in an attempt to reduce both application frequency and input costs. Ryan's research is progressing nicely and he will utilize this research for his M.S. thesis project.

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



Chambourcin



Vidal Blanc

Submitted by: Dr. Todd Willian

Jerry Baker

Jerry E. Baker was a business owner and philanthropist who has shared of his time and resources to benefit WKU, the Commonwealth, and especially the Department of Agriculture. He passed away peacefully at his home at the Baker Arboretum on June 22, 2017. He leaves a great legacy.

Baker, a 1951 graduate of Bowling Green Business University, served as President of Airgas of Mid America until 2010. Baker established professorships and scholarships in music and horticulture, as well as scholarships in art, dance and athletics. In 2008 he endowed the Leichhardt Professorship of Horticulture. The inaugural recipient is Dr. Martin Stone, who serves as director of the Baker Arboretum.

In April 2006, Jerry made a \$15 million gift to WKU that included his home, art and arboretum, making it at that time the single largest gift by an individual to a public university in the Commonwealth of Kentucky. The Baker Arboretum is used as a teaching laboratory and research center for new and rare plants. The Downing Museum, which officially opened in 2009 as a part of The Baker Arboretum, displays a vast collection of artwork by the late Joe Downing. Joe Downing was a world-renowned artist, WKU alumnus and brother of the late WKU President Dero Downing. Baker and Joe Downing were long-time personal friends who collaborated on the design of the Downing Museum.

Jerry was a member of the Cupola Society, the Society of 1906, the Cherry Society and the WKU Alumni Association and has served on the WKU Foundation Board of Trustees. He was awarded 'Friend of the Year' in the Department of Agriculture. Jerry received an honorary doctorate from WKU in 2001. He was named as a 2002 Distinguished Service Medal recipient, Volunteer of the Year from the WKU Foundation and was selected WKU's Philanthropist of the Year in 2005.



We hope that you have enjoyed our Newsletter this year. Please make a gift today to support the Department of Agriculture. Your financial support will help with student learning opportunities outside of the classroom.

Please make checks payable to the
"WKU Foundation"
Donations can be mailed to:

Department of Agriculture
Western Kentucky University
1906 College Heights Blvd #41066
Bowling Green, KY 42101



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*Valid for in-store use only. One coupon per visit.
Excludes weddings, funerals, and delivery.*

**HOLIDAY OPEN HOUSE:
November 3rd & 4th 2017
9:00 am to 4:00 pm**

Alumni Gathering

Friday, October 13, 2017

4:30-6:00 p.m. Farm Tours
6:00-7:00 p.m. Dinner
7:00-8:00 p.m. Business Meeting /Kid Activities
8:00 p.m. Rye Davis Concert

Saturday, October 14, 2017

Tailgating—South Lawn

Please call (270) 745-3151 or email deanna.durrant@wku.edu to RSVP by September 29, 2017

Alumni Facebook Page

<https://www.facebook.com/wkuagalumni>
Alumni Dues are \$15 and can be sent to the WKU Ag Dept, Attn: Alumni or paid at the Friday Homecoming event.

WKU Football Kickoff— 3:30 p.m.