One of the highlights of every semester in production classes is going to producer farms to personally observe how they operate. This generally ties the semester together in a nice package for the students and helps them see practices first-hand that they heard about in class, likely in pieces.

In the spring of 2020, since field trips were not an option, Ken Coffey did the next best thing: He went on field trips himself, took video clips, and pieced together virtual trips for both the stocker/feedlot and sheep production courses.

The stocker/feedlot field trips included two visits, first to the stocker operation of Jim Hollenback near Jay, Okla.

“This trip is always a great stop and a great educational program for our students,” said Coffey. “Jim does an amazing job explaining the stocker operation from all perspectives—from the business, to the nutrition, to the management.”

Hollenback discussed cattle hedging; his feeding operation, which includes pasture,
commodity feeds, corn, and corn silage; his receiving and health management program; and showed his working facilities, receiving pens, and pasture facilities.

“The students come away from there with their eyes rolling around in their heads because of all the information that Jim gives them,” said Coffey. “I just couldn’t let the students miss this opportunity.”

The second stocker/feedlot trip was to Ron Morrow’s farm and provided information on their grazing management program that is necessary to finish calves on grass, the genetics that work best for them, and how he and his business partner, Ann Wells, market their beef and lamb products through Ozarks Pasture Beef. The video tour also allowed students to see the animals at different phases of growth and finish, along with pastures filled with clovers to provide high quality forage that is required to finish beef.

“Ron is one of the real pioneers in grazing management,” said Coffey. “He always challenges students to think and apply information, having been an award-winning teacher at the University of Missouri before coming back to his home in northwest Arkansas.”

The virtual field trips also included stops at two sheep production farms, including Coffey’s own, Maple Gorge Farm.

Thanks to the help of Dirk Philipp’s filming, Coffey was able to discuss numerous types of fencing, forage management, low-input production practices, grazing management, nutrient cycling in a pasture system, and facilities.

“We use our farm often for educational programs for students, veteran farmer groups, agency tours and training programs, or to anyone else who just wants to know the basics of raising small ruminants,” said Coffey. “I often tell them, ‘this is not my day job,’ so being an educator first of all, I gladly show them, ‘the good, the bad and the ugly.’”

The second sheep production field trip was to the farm of Sarah Shelby, a graduate student in the Department of Animal Science. She discussed the challenges of raising a small flock on small acreage, being adaptable to different situations, and showed how costs could be controlled in small operations. Additionally, Shelby provided information on pasture and parasite management, animal selection, her feeding program, and how to build practical, simple facilities to address potential problems.

“Sarah has raised sheep for a number of years and does an excellent job marketing her animals to be able to achieve a profit from a small flock,” said Coffey.

While students could not physically tour each operation, Coffey’s informative virtual tours provided them with a sense of what it is like on a day-to-day basis for different farmers.
They also gained an appreciation of the “final product” in terms of piecing together economics, health, nutrition, management, and facilities. While there is no substitute for personally stepping in manure and tearing off grass, the virtual field trips were not a bad alternative under the circumstances. Student comments were very positive, and they certainly appreciated being able to see the complete package at different operations and how each operation utilized different strategies for success.

Alumnus Leads Penn State Team to 2020 ASAS Academic Quadrathlon Championship

Ben Williamson, an alumnus of the Department of Animal Science, and his team of students from Penn State University won the 2020 National Academic Quadrathlon held during this year’s American Society of Animal Science (ASAS) meetings. The virtual meetings were held from July 18-23.

“Our students were resilient in not only preparing for the contest, but also embracing an alternative platform,” said Williamson. “It is a great accomplishment that reflects first on our students, and second on our program.”

The ASAS Academic Quadrathlon is comprised of four sections: lab practicum, written test, group presentation and quiz bowl. Information and skill sets include the entire scope of animal science, from application, management and basic science in food animals, dairy, meats, equine and companion animals. The contest is a two-day event, and four team members must work together balancing their strengths to complete assigned tasks while competing against students from other universities.

The championship was Penn State’s second in the past four years but came with an added level of difficulty stemming from the typically collaborative event being held in a remote setting.

“The virtual platform certainly resulted in some differences,” said Williamson. “Our students had to be creative in how they planned to work together and prepare, in addition
Despite challenges, the ASAS and its organizers were able to provide a full schedule of various events, informative presentations and more, including the quiz bowl.

“I am incredibly grateful for their commitment to hold the event,” said Williamson. “I know that the extra coordination and creativity was no small task, and that does not go unnoticed.”

Williamson earned his M.S. with a focus on reproductive physiology from the University of Arkansas in 2012 under the tutelage of Michael Looper and Charles Rosenkrans. Currently, he serves as an instructor, livestock judging coach and an advisor for Collegiate Cattlewomen within the Department of Animal Science at Penn State University.

**Department Group Teams Up with Poultry Science to Provide Video Tours of Red Meat Abattoir**

Department of Animal Science staff and faculty members, Tim Johnson, Kelly Vierck and Janeal Yancey, teamed up with John Marcy (Poultry Science) to provide a filmed tour of the University of Arkansas System Division of Agriculture Red Meat Abattoir for the Arkansas Farm Bureau to use in the organization's virtual Officers and Leaders Conference.

The tours took place in late July and provided an opportunity for the group to showcase some of the equipment and research capabilities of the facility.

“I am always happy to open our doors to allow the public in to see what we are doing and what our facilities are capable of,” said Yancey. “I love to share about our research projects and teaching opportunities.”

The video tour, along with all the other sessions from the 2020 Officers and Leaders Conference, can be viewed on the Arkansas Farm Bureau's website at arfb.com.

**Animal Science Alumnus Leads Team in Developing**
Kevin Clark, an alumnus of the Department of Animal Science, and his team at NOWDianostics in Springdale, Ark. have created a lab-quality, rapid diagnostic test for COVID-19 that provides an easy-to-use, at-home solution requiring no additional equipment for processing and reading.

"Across the country, there is an unmet demand for all types of COVID-19 testing to help respond to this unprecedented pandemic," said Clark. "We know that high-quality, easy-to-use tests will be key to overcoming COVID and to getting America up and running again."

The ADEXUSDx® test, which is currently being evaluated through clinical trials to validate its performance, takes just 15 minutes to get a result and requires only a drop of blood obtained through a sample stick. Ultimately, the goal is to obtain authorization for anyone in the U.S. to have access to this technology. An application for Emergency Use Authorization in the U.S. was submitted to the Food and Drug Administration in May and is currently pending review.

"We believe the ADEXUSDx® COVID-19 test's high-efficacy results, delivered on our revolutionary platform, will be a game-changer for America," said Clark. "We are proud to be doing our part and eager to make the test available in the U.S."

Clark graduated from the University of Arkansas in 1986 with a B.S. in animal science and then began a M.S. program in immunology. He received the Young Alumni of the Year Award in 2001 and was later named a Department of Animal Science Graduate of Distinction in 2014.

New Faculty Highlight: Kelly Vierck

Kelly Vierck joined the Department of Animal Science faculty ranks in June and will be focusing on meat science and muscle biology.

“I look forward to establishing an exemplary meat science education program at the University of Arkansas,” said Vierck. “Through the implementation of experiential, hands-on labs and lectures, I want to bring cutting-edge research and industry-focused knowledge full circle to develop students into career-ready alumni who are demanded by the meat industry.”

Vierck received her Ph.D. from Texas Tech University, where her dissertation focused on the "postmortem influences on beef flavor development and tenderness." She received her M.S. from Kansas State University and her B.S. from Oklahoma State University as a food science major with an emphasis on meat science.

Vierck previously served as a graduate research assistant within the Department of Animal and Food Sciences at Texas Tech University where she taught numerous animal science courses and was the graduate advisor for the Texas Tech Beef Improvement Team (TBIT). Her research focused on beef flavor and tenderness development and she was also a member of the Beef Improvement Team (BIT), which developed and marketed the first beef carcass color-based grading system in the United States. She has also served as a workshop leader and web presenter at the annual American Meat Science Association Conference and was a guest presenter at the National Beef Quality Audit Conference. Her research has been featured in the publication "Meat Science".
and food science courses, produced scientific research publications and participated in the National Cattlemen’s Beef Association-Product Quality Research Program.