

Volume 8 - Spring 2022

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# IN REMEMBRANCE OF DR. RONALD DEL VECCHIO

Dr. Ronald Del Vecchio, 64, of Springfield, Missouri, passed away on April 4, 2022. At passing, Del Vecchio was the dean of the Darr College of Agriculture at Missouri State University in Springfield, Missouri.

One of the mantras of Missouri State is to "Make Your Missouri Statement". Over the past five and a half years, Del Vecchio not only made his Missouri Statement, but led the Darr College of Agriculture to make its own. To understand the enormity of the task he agreed to when he joined the College of Agriculture family was to know how passionate he was about academia. During Del Vecchio's time at Missouri State, he ushered the then Darr School of Agriculture to the now Darr College of Agriculture, was involved in the acquisition of the Kindrick Family Farm, established a 3+1 program with the University of Arkansas in poultry science, and led the College in earning \$10.4 million in grant funds. Those "small" tasks and many others are part of the legacy Del Vecchio leaves behind at Missouri State.

Though Del Vecchio fought a hard battle with cancer, he did so with grit and determination. Even before he was diagnosed, Del Vecchio showed a tenacious spirit.

"You don't quit; you don't just not show up; you don't go hide in a corner. You make it happen, or try hard to make it happen."



We look back in reverence and appreciation for the time we were fortunate to have with Del Vecchio. We remember him as a leader who made his "Missouri Statement" on the College of Agriculture and the people who call it home. Thank you to everyone who attended Del Vecchio's memorial service, has reached out in sympathy and kept us in your thoughts and prayers. We look back with respect, but look forward to a bright future working hard to ensure excellence in delivering a quality education to our students and moving Missouri agriculture forward.

### Meet The Writers



Andi Atkisson Managing Editor Everton, Missouri



Caitlin Jedlicka Layout Editor Koshkonong, Missouri

#### Letter from the Editor:

As agricultural communications majors, we are a small but mighty group. When we first began our collegiate careers we didn't realize the amount of time we would spend together in group projects, clubs and educational opportunities. Our amount of dependence on each other grew even more during the creation of this magazine. It is with my greatest sincerity that I write this letter to commend my colleagues and best of friends.

Our magazine features 12 articles which tell how students, alumni, faculty and staff have found their place, followed their passion, and made their "Missouri Statement", highlighting how the Darr College of Agriculture sets itself apart. I want to thank the individuals on our team who ensured every part of this magazine is perfect for our readers to enjoy.



Tucker Bittick Copy Editor Mount Vernon, Missouri



MacKenzie Larson Advertising Editor Springfield, Missouri

Tucker Bittick, copy editor, was the thread that kept everyone together. He served as a constant sounding board for ideas, and did an extensive job in reviewing and editing each piece. Katy Grant held the role of copy editor but did much more work than just editing. Throughout the creation of each story she brought insight on software, created a sense of accountability for each team member, and willingly completed every task multiple days before it was due. She was a true champion for the entire process.

Caitlin Jedlicka, layout editor, spent extensive hours putting together the beautiful, cohesive designs found in this magazine. Her willingness to work on the magazine in her own time set the entire team up for success.

Karson Thomas brought



Katy Grant Copy Editor Carrollton, Missouri



Karson Thomas Layout Editor Republic, Missouri

additional assets to the team as layout editor with her creative ideas and ability to broaden perspectives. MacKenzie Larsen worked diligently with the class and community to ensure advertisements were sold.

I would also love to also thank Katelyn McCoy for the influence she had on each of our lives. She finds the potential in all her students and does her best to ensure those around her feel capable. In addition, Taylor Allee served as strong guidance for us along the way.

Thank you for taking time to read this magazine. It is our hope you will take what you read and spark conversations. It has been an honor to tell the stories of the Darr College of Agriculture.

Sincerely,

Andrea Atkisson

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A photo captured by Caitlin Jedlicka in honor of Dr. Ronald Del Vecchio, who left an impact on the way we see the Darr College of Agriculture. May the logo we continue to wear be a reminder of the impact he made on students, faculty and staff as the first dean of the College of Agriculture. Photo courtesy of Caitlin Jedlicka.



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#### **Stories Matter**

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## **Follow Your Passion**



## **Follow your Passion, Find your Place**



Missouri State University's previous mission stated, "Follow your passion, find your place." While the branding has changed to reflect a new statement, the tradition of this statement lives on in alumni, faculty and staff. The ideas and people in the following section are all about finding one's passion and using it to move agriculture forward.

## MANMANNULLULL

# STORIES MATTER

How to tell your story in a captivating way By: Andi Atkisson Everyone has a story people need to hear. Ones with tragedy, complete victory and filled with epic details. The kind of tales children hear and continue to tell as adults. Awe-inspiring, factual and realistic. Ones which describe shortcomings and how they were overcome. Most importantly, ones that matter.

When it comes to stories, should they be shared or kept in storage for a questioning person? The path to an industry with fewer misconceptions begins with advocates listening and telling simple stories which lead to heartfelt discussions.

Any person can be an avid advocate, expanding outreach to new crowds and people with diverse perspectives. Students in the Darr College of Agriculture channeled their inner advocate.

#### 2021 Public Affairs Conference

The chatter of voices filled the large Plaster Student Union Theatre where students, community members and staff were gathered to listen to a panel of speakers on Bridging the Divide. Four student speakers were dressed professionally, sitting in large grey chairs on the stage. The moderator introduced the topic and allowed the students to tell their own story. Each speaker beamed with excitement as they took their turn speaking about their diverse ties to agriculture. There was a passion in their eyes and a large amount of bravery on their tongues. Kendra Betz represented agribusiness. Kathryn Horner represented agricultural communications. Jailyn Perez represented animal science. Matthew Huchteman represented plant science.

Together they stood for students willing to make a difference for agriculture. When the floor opened to discussion, hands burst in the air from the crowd. There was never a moment of silence. On every question the speakers added valuable points, stories and personal touches. Responses on controversial subjects like genetically modified organisms (GMOs) and antibiotics were tender and didn't seek to blame an industry or those misinformed. Most importantly, speakers admitted when were unaware of an answer and humbly mentioned they would research accurate information and get back with them.

Bridging the Divide sparked conversations for weeks to come.

"We had several questions afterwards because of the panel discussion," Huchteman said. "We interacted with the Dietetics Club at one of our Cattleman's meetings because of the conference."

Allowing people to take their own perspective on each story creates the desire for them to share.

"We make the greatest impact on our immediate circles," states Kate Lambert, agriculture advocate.

#### The Secret to Great Discussions

Growing up in suburban Chicago, Kate Lambert understands the disconnect between those who know production agriculture and those who may not. She is currently the vice president for marketplace engagement for FCS Financial, serves on the Missouri Soybean Association board, farms with her husband Matt and raises a family.

#### "We make the greatest impact on our immediate circles." - Kate Lambert

All on top of being an extraordinary speaker, blogger and advocate for Missouri agriculture.

"We are ignorant in its truest form- there are things we simply do not know about the unique lifestyles of those who are different than us. Once we recognize the difference, it allows us to open our ears to topics we may not have had capacity for earlier," Lambert stated.



College of Agriculture panelists from left to right: Moderator Dr. Elizabeth Walker, Kendra Betz, Kathryn Horner, Matthew Huchteman and Jailyn Perez. Photo courtesy of Megan Wilson.

Production agriculture can be intimidating with specific lingo, complex markets and a diversity of livestock and plants. It takes someone willing to simplify the industry like Lambert to make an impact on those with diverse backgrounds and settings.

The secret to great discussion begins with listening. We are called to lean in to discover the choices they make and listen to what consumers' actual questions are. Then, after we have done these things we can be effective according to Lambert.

"We have to start listening as an industry, if we truly want to see change," Lambert said.

Deep and meaningful conversations are with people who you can find common ground with, usually this connection occurs after learning about their concerns.

Another important tip is to take the emotion out of storytelling. It's never an "us" versus "them" mentality. Emotions stir up reactions which disable conversations, so keep a clear head when questioned.

"Just be honest and truly you," Betz encouraged.

Truth and integrity allow for a greater ability to expand your worldview. Considering others'

> "We have to start listening as an industry, if we truly want to see change." - Kate Lambert

perspectives can be a challenging task but looking past biased beliefs is what advocating is all about.

"Don't be selective on who you reach out to, offer your story to any of the people who surround you," Betz mentioned.

#### Lambert's Lessons for Advocacy

1. Read your news, don't listen to it-according to Lambert, emotional responses are reduced if a news article is read compared to watched or listened to.

2. Choose the news you listen to carefully

3. Pick friends carefully and where time is spent

4. Have intentional exposure to people outside of agriculture-Whether it is a popular newsletter or a Facebook group, find



multiple ways to look at the same information. Reading news does not elevate emotions like visual media.

Foster intentional friendships, listen and engage in meaningful conversations. Make the most out of time spent with those who are involved in the same area.

"Exposure begins with friends, but should grow to those outside of the industry," Lambert said. "As we expose ourselves to their concerns we can feel less guilty sharing our own."

"Exposure begins with friends, but should grow to those outside of the industry." - Kate Lambert

#### Pursue Knowledge

"In agriculture, we are different than most other people in the country. We have the least right of anybody to go around and be hurtful to people who are different. We should be trying to understand those differences," Lambert highlighted. One way to understand each other's differences is to commit to being a lifelong learner.

#### Ways to Grow

1. Become a learner – listen to podcasts, read books, continue asking questions.

2. Find someone who tells their story well and take notes. Advocates across the world make a positive difference in agriculture daily simply by telling their story well. 3. When completing your everyday tasks, ask yourself how you can teach this to someone.

#### Impactful Insights

People make the most impact on their immediate circle. In summary, Lambert suggests to start where you are, and speak to those you are closest to first. Secondly, create intentional relationships with those around you.

You don't need any special skills to tell your story. You only need the ability to listen, willingness and compassion to show others what you care about in the agriculture industry. At the end of the day, a good advocate has to decide if they are more interested in their strong opinions or becoming a strong, reliable voice for agriculture.





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MSU Bear Pantry and City of Springfield fight food waste issue

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**F** ood insecurity and waste are constant battles, not only in the United States, but across the globe. For the City of Springfield and Missouri State University, two organizations are stepping up to address food issues in the Springfield area with unique ties to Missouri State.

#### **BEAR PANTRY'S FIGHT**

College is the first step toward freedom and adulthood for many, or at least a transition period toward being independent. Yet, when it comes to food and nutrition, The Hope Center of Wisconsin found that 36% of college students nationwide go hungry. Missouri State is working to lower that number while also addressing food waste through the MSU Bear Pantry, part of the Center for Community Engagement.

Alex Johnson currently serves as director of the Bear Pantry. According to Johnson, the number of hungry college students at Missouri State currently sits at 2% of the student population.

"We know the 550 folks who we are serving right now isn't the true

need that exists" Johnson said. The team at the Bear Pantry is working hard to increase the

number of patrons, while also finding ways to make the process of receiving food as easy as possible.

#### "LAST YEAR, THE CAMPUS GARDEN WELL EXCEEDED 500 POUNDS OF DONATED PRODUCE TO THE PANTRY, AND ITS PATRONS." - ALEX JOHNSON

"We want to make sure that people who need to utilize food assistance don't have barriers, whether it's a negative stigma or hours of operation or physical accessibility issues."

Located in University Hall, students can stop in to pick up the items they need such as canned food and fresh produce or personal hygiene items like shampoo and toiletries. The pantry's main goal is to lower food insecurity on campus, while increasing the nutritional value of the food they provide. The Missouri State Campus Garden has

#### By: Caitlin Jedlicka

teamed up with the Bear Pantry to provide fresh and local food sources to the patrons of the pantry, no matter the time of year.

Clover Valley

"Last year, Campus Garden well exceeded 500 pounds of donated produce to the pantry, and its patrons," Johnson added.

Fresh produce grown by the Campus Garden is available throughout the growing season, but not the only source of produce the pantry will be utilizing in the future.

#### HYDROPONICS

Darr College of Agriculture students are also teaming up with the pantry to provide the knowledge of not only produce and production, but also hydroponics. With the use of hydroponics, plants do not need to be grown outside, nor do they need large amounts of space. Instead, plants are grown in a soil free media aided by grow lights.

"Hydroponics has been a neat adventure to get immersed into, and it makes me want to join the College of Agriculture as an undergrad," Johnson joked.

The project began with graduate student Scott Cooley, after taking a

class on hydroponics. Empowered by the idea, he reached out to the Bear Pantry, offering to create a hydroponic system to grow fresh produce and leafy greens. The project started summer of 2020, and was an instant hit. Patrons of the Bear Pantry flocked to the hydroponics system because they were being provided delicious and fresh produce.

Cooley's project laid the framework for the hydroponics systems that are now available within the Bear Pantry. As the project took off in the summer of 2020, the pantry saw an opportunity to write a proposal that would allow for student sustainability funding to purchase hydroponics systems. The systems would increase the amount of produce. Each system can hold 40 to 50 plants and will be overseen by College of Agriculture graduate student, Mary Books.

As the Bear Pantry continues to grow, one thing on Johnson's mind, as well as the mind of the City of Springfield, is food waste. While focusing on the food insecurity issue is the first item on the agenda for Johnson, in the future he would like the pantry to expand more into the food waste issue.

"One thing that we're looking at right now is developing and sustaining a food recovery program, especially with the resources here on campus," Johnson explained.

By collaborating with Chartwells, the on-campus dining facilities, the Bear Pantry will recover food that is not eaten by students to then be used by the food pantry participants.

#### FOOD WASTE

While the Bear Pantry is just getting started on its food waste prevention journey, the City of Springfield has its focus set on this important issue.

According to the City of Springfield, "Food waste is the second largest component of our



Left: Hydroponics system bought for the MSU Bear Pantry already being used to grow lettuce and herbs. Right: Campus Garden staff planting the first set of plants and seeds in the hydroponics system. Photos courtesy of the MSU Bear Pantry.

collective waste stream, accounting for 12% of the waste that makes it to the landfill every day."

Over 30 tons of food accumulates in the landfill every year. An initiative has been started to combat that number and lower the food the city wastes annually. Dish to Dirt, a composting program has been established to teach citizens how to properly compost and the importance of composting.

The City of Springfield has also developed a commercial program to persuade local restaurants to join the efforts to combat food waste called Food Matters Springfield.

Food waste is a dynamic issue; not only does it mean food is filling up our landfills, food is not being consumed. However, it can be used in other ways.

#### THE COMPOST COLLECTIVE

From city government to nonprofit organizations, Springfield has a large support system for their efforts to reduce food waste and increase composting efforts. The Springfield Compost Collective was created to bring mindfulness to the issue of food waste and recycling by composting food scraps.

With a primary goal of creating awareness and educating on the issue, the collective works not only to target citizens but businesses involved in their program to help provide Springfield with a cleaner landfill and richer soils. Businesses such as Ott's Pasta, Kingdom Coffee, Mudhouse, Mama Jean's and

#### "WHAT'S IMPORTANT IS WE'RE HAVING THIS CONVERSATION AND WE'RE ALL COLLECTIVELY WORKING TOGETHER." - CLAIRE PORTER

many others have taken the jump toward a greener business.

The collective hopes to stimulate a city-wide composting program to assist them in their sustainability efforts and increase citizen participation throughout the city.

"Helping people rethink their food scraps, while also recognizing the greater impact of food scraps and the benefits it can have on the soil is a goal of ours," said Claire Porter, executive director of the Springfield Compost Collective.

According to Porter, "Moving forward, citizens need to be conscious of what their food waste can become when part of a compost as well as recognizing ways to reuse/reduce."

Two arms make up the Springfield Compost Collective, the first being education. Inside this sector, workshops and hands-on trainings help equip residents with knowledge and tool kits. Food scrap collection services is the second arm of the collective. It focuses on businesses and residents that want to help fight the issue but do not have a place to compost. The collective picks up the scraps and composts them for the resident at a composting facility.

"What's important is we're having this conversation and we're all collectively working together to keep these food scraps from having such a detrimental impact on our communities," Porter said.

The collective continues to work hard to raise awareness through the use of yard signs and educational information, while also growing relationships with people from around the community. Each person involved in the collective has the potential to help reach 10 more people. With a single person a large difference can be made for Springfield and beyond.

#### SIZABLE STRIDES

Although food waste and food insecurity are major issues in Springfield and on the Missouri State campus, with collaboration from groups working to address the issues, the city and campus could see sizable strides in coming years.



Compost being collected by Springfield Compost Collective Executive Director Claire Porter. Compost is used for gardens and farms, being made from food scraps in small compost stations or collected by the collective and taken to a large compost area. Photo courtesy of Porter.

Whether it be the Bear Pantry providing clean and nutritious food to college students and staff, or the Springfield Compost Collective working to use food waste as a growing medium for produce, the future of food waste and insecurity will hopefully continue diminishing at a rapid rate.



# Bears with a Purpose

Ag Bears serve the Springfield community through club outreach and course engagement

By: Katy Grant

Ctudents in the Darr College of Agriculture engaged in 1,130 combined hours of community service in the 2021-2022 academic vear. Between several dedicated College of Agriculture organizations and volunteer requirements for courses, students' eyes have been opened to the needs of the Springfield community. The College of Agriculture prides itself on volunteer involvement and encourages students to take every chance to give back to the community they call home throughout their college experience. Not only do hands-on service activities set the College of Agriculture apart from other colleges across campus, but its students develop a passion for service and equips them with unique skills during their time at Missouri State.

"Students find that they are able to develop skills in leadership, communication, working well with a team and finding solutions for problems through community service activities," stated Prep Scholar, a standardized test preparation resource.

#### **Honored to Serve**

Delta Tau Alpha (DTA), an agriculture honor society, exhibits a passion for service as one of their organizational standards both on the national and chapter levels.

"DTA not only allows us to actively improve our community, but it combines service with academic achievement to create a unified success." - Sarah McCord

Like other honor societies across campus, DTA members are initiated with good academic standing and a minimum GPA requirement; however, academics aren't members' only priority. Missouri State's DTA chapter incorporates service projects before or after almost every monthly business meeting to ensure members run with opportunities to be engaged in their community.

"DTA not only allows us to actively improve our community, but it combines service with academic achievement to create a unified success," explained Sarah McCord, DTA historian.

With monthly collaboration through Adopt-A-Street, members, "get their hands dirty," by cleaning the roadside of Trafficway street near the Missouri State campus. Encouraging fun competitions, such as the strangest piece of trash found, keeps members eagerly coming back to serve the following month. Other service projects include writing notes to veterans and those in nursing homes. In fall 2021, a unique service opportunity was presented to DTA called the COVID-19 Care Project. Members gathered items including blankets, snacks, activity books, craft supplies and more to compile "care kits", which were donated to isolated patients in COVID-19 care units.

"Being able to bring joy to those experiencing COVID-19 was inspiring," McCord elaborated, describing her influential service experience. "Especially since the woman who reached out and coordinated our efforts shared an image of how much the donations meant to patients."



Sigma Alpha sisters Jordan Pope, Montanna Forcum and Amber Gerlemann packaging baby items at Newborns in Need. Photo courtesy of Karson Thomas.

#### **Creating Skills for Service**

As a small, but mighty, presence in the College of Agriculture, Agricultural Communicators of Tomorrow (ACT) conducts an impactful service project each year to not only give back to the community, but to inspire members to use their skills, stories and experiences for the betterment of others, just as communicators do within the agriculture industry.

Putting skills to action while capping off the fall 2021 semester, ACT teamed up with the membership of DTA for a "Tied Together for the Holidays" event to create fleece tie blankets. Fifteen blankets were gratefully accepted by the Children's Miracle Network Hospital at CoxHealth to be dispersed to patients as childcomforting items during anxious hospital stays.

#### **Sisters of Service**

Service represents one of the four pillars of Sigma Alpha, a professional agriculture sorority. A group of 21 sisters eagerly serve the community as often as possible – typically a minimum of three times per semester. Each semester yields a group of new candidates to join the sisterhood which includes a professional interview process.

"During the interviews of new

members, one of our questions is, 'Of our four pillars – scholarship, leadership, fellowship and service – which one is the most important to you," illustrated Karson Thomas, Sigma Alpha president. "A lot of new members choose service because they love giving back to the community and volunteering."

As sisters, much of Sigma Alpha's service is tailored toward assisting and empowering less fortunate women in the Springfield area. Two of their most significant activities include donating to the Harmony House – a safehouse for domestic abuse victims, and volunteering at Newborns in Need - providing new and less fortunate mothers with items they may not have access to for a child. Members shopped for bottles, pacifiers, blankets and burp cloths to take to Newborns in Need and helped package the kits at the facility on numerous occasions.

#### "A lot of new members choose service because they love giving back to the community and volunteering." - Karson Thomas

"Our girls kept going back to help at Newborns in Need throughout last semester and they are just very grateful for our continuous support," Thomas explained.

With COVID-19 variants still lingering in the Springfield area, Thomas noted how the sorority has adapted their service by hosting coat and infant supply drives in campus buildings to accommodate for nonprofits not accepting volunteers. Sigma Alpha sisters make sure the impact of their service isn't dictated by uncontrollable circumstances, but instead is measured by the needs of others.

#### **Growing Hearts of Service**

Since 2013, the College of Agriculture has operated an outdoor plot and indoor greenhouse to provide produce alongside the MSU Campus Garden. It was created by the Sustainability Commission and is funded by the university to provide fresh food to the campus Bear Pantry and local food pantries in the area. Andi Atkisson serves as the Campus Garden manager and operates the garden alongside three assistant managers.

"Every year we produce over 500 pounds of produce," described Atkisson proudly. "Over my two years of being with the garden, we've produced almost 1,200 pounds because we've exceeded that 500-pound mark each year."

A wide variety of vegetables and produce that can be found in a grocery store can also be found in the Campus Garden. From tomatoes to kale, and blackberries to strawberries, the Campus Garden has a plentiful supply to be given to the Bear Pantry during and outside of the typical growing season. Thanks to the recent addition of a low tunnel system – hoop house coverings over the raised beds – growing seasons can be extended, and produce can be harvested even in frigid winter months. "I think it is the most rewarding volunteer opportunity on campus because you know what you're doing is making a difference," Atkisson exclaimed, regarding the 60 volunteers last semester.

#### Service-Learning

Course offerings in the College of Agriculture are more unique and hands-on than a typical college lecture, however Food Security and the Agriculture Industry Study tend to stand out due to their service components. A hybrid learning style that combines lecture materials with a service aspect is known as service-learning.

According to Missouri State, "Over the course of the 2020-2021 academic year, there were increases in the number of students completing service-learning courses, the number of faculty offering service-learning courses, and the development of new and sustainable community partnerships."

Both Food Security and the Agriculture Industry Study are taught, at least in part, by Nichole Busdieker-Jesse, an agricultural business instructor, who enjoys opening the eyes of her students though unique experiences and serving alongside them. With the desire to teach the Food Security course since she began

as an instructor in the College of Agriculture, she jumped at the opportunity as it became available. She teaches the four pillars of food insecurity - utilization, access, availability and stability – and how there is no single solution to the issue. Students are then required to complete four hours of community service related to one of those four pillars to connect back to what is learned in class. Locations students serve include Ozarks Food Harvest to pack backpack meals for students, Convoy of Hope to make wellness kits for disaster relief, the Campus Garden to weed beds for healthy produce, and several more.

"I think that's what the servicelearning aspect really does, it immerses you in struggles of the consumer side," Busdieker added. "You literally see exactly what challenges these people are facing."

Alongside Dr. Arbindra Rimal, Busdieker also instructs the Agriculture Industry Study program where students embark on a week-long tour of agribusinesses in Missouri. Realizing nonprofits operate with the same principles of agribusiness, a service component was added in 2021 as a need for volunteers arose. At Ozarks Food Harvest, students learned about the same business aspects as other locations, but they also fed their



Food Security students volunteering at the Campus Garden for their servicelearning requirement. Photo courtesy of Nichole Busdieker-Jesse.

passion for service by ending with volunteer work. Busdieker notes student feedback shows it's the best received change to the program.

"The way the students can give back, have fun, and learn all at the same time is amazing," Busdieker elaborated. "It just gives you the feeling that what we're doing matters; we're in the right place, at the right time, to do the right thing."

#### "It gives you the feeling that what we're doing matters; we're in the right place, at the right time, to do the right thing." - Nichole Busdieker-Jesse

While COVID-19 forced lives to halt over the past two years, College of Agriculture students were inspired to find innovative ways to serve the community as needs were more prominent than ever. From participating in the COVID-19 Care Project through DTA, conducting coat drives with Sigma Alpha or serving at Ozarks Food Harvest during Agriculture Industry Study, the service never stopped; creativity just became more profound.

"We're always looking for offthe-wall, very local and impactworthy service to do," Atkisson enthusiastically shared, regarding how DTA chooses service projects.

As a pillar of Missouri State, "community engagement" is not only taught within the classrooms of the College of Agriculture, but more importantly found in the time spent beyond the classroom. Ag Bears are unique, especially in terms of their irreplaceable learning experiences, appreciation for finding their purpose and their growing desire to serve whatever community they find themselves in next.



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# Who's by the Owl?

Agriculture instructor shortage has become increasingly problematic in the state of Missouri

#### By: MacKenzie Larsen

A cross the state of Missouri, the lack of substitute teachers and agriculture educators has increasingly become an issue. Schools across the state have struggled filling substitute and long-term teaching positions. These two issues make it difficult for teachers to take time off and have the flexibility they need. According to Matt McIntire, a Missouri State University alumnus and agriculture instructor at Archie High School, several teachers have had to help taught additional

classes and combined classes.

#### Agriculture Education at MSU

Sarah McCord, is currently pursuing a degree in agriculture education at Missouri State.

"Education is a hard place to be right now, everyone is struggling," McCord said.

Within the Darr College of Agriculture, Dr. Jim Hutter, associate professor of agribusiness, prepares agriculture education students through classroom instruction and coordinating student teaching efforts.

Through the shortage of teachers, Hutter feels the need to get students through the program and out into the workforce. "It's a glass half full or half empty. Right now it's hard to find a teacher, but if you're coming out with an agriculture education degree, you can essentially pick where you go", says Hutter. Advocating to increase the interest in teaching agriculture will come from early involvement.

"Get involved early. Join organizations and learn. That way you can be ready when you get into those full-time teaching positions," McIntire explained.

#### Decreasing the Shortage

Increasing the number of undergraduate students who pursue the agriculture education program will help decrease the shortage of teachers. However, both McCord and McIntire believe that an increase in pay for agriculture educators will help increase the number of educators. According to KMOV4 News, on March 7, Governor Mike Parsons addressed the teacher shortage and proposed that the state increases the minimum salary for teachers. The current minimum salary is \$25,000. With the new proposal, the minimum salary would increase to \$38,000.

An increase in pay would likely persuade more students to

become agriculture teachers. "A lot of younger people that go into education would really benefit from an increase in pay," said McIntire. "That will draw more people into education."

According to a 2002 supply and demand study by researchers at Virginia Polytechnic Institute and State University, the agriculture teacher shortage is not a new issue. The study indicated that significant efforts were needed to increase the attractiveness of the agriculture education profession. Twenty years later, the problem is still prevalent enough to cause undue stress in schools across the state of Missouri.

For years, concerned Missourians have stressed the importance of paying teachers a livable wage. Showing additional support to agriculture educators by raising the minimum wage across the state could encourage more undergraduate students to pursue an agriculture education degree.

However, the motivation to teach often comes from a place

other than finances.

"Most people that truly go into teaching, it's not about money. It's about sharing their experiences and helping students reach their goals while also bettering their students," Hutter said.

#### Reapped Romorrow

Through programs like MO Teach Ag and MVATA (Missouri Vocational Agriculture Teachers Association) who support agriculture educators in and outside of the classroom, current agriculture instructors are constantly pushing to reduce the teacher shortage.

"We post scholarship opportunities to student teachers in agriculture and promote good things teachers are doing," McIntire said.

With improved policy, an increase in wages, a push for teaching agriculture, and supporting teachers, these organizations will hopefully help lead to both substitute and longterm teaching positions filling up. Through these efforts, educators across the state of Missouri will hopefully start to feel a decrease in the immense pressure to fill position openings.

Missouri State is certainly doing their part to alleviate the agriculture educator shortage. Historically, the agriculture education program has placed more student teachers into fulltime positions than anyone else in the state. Hopefully as time moves on, all high school agriculture programs in the state of Missouri will successfully hire qualified agriculture instructors who will proudly say, "Here by the owl."

"Work hard and give 110% at everything you do. If you show up and work hard, you will overcome a lot of obstacles." - Dr. Jim Hutter



Hutter teaching future agriculture instructors in AGE 318: Introduction to Agricultural Education. Photo courtesy of Katelyn McCoy.





24

#### **Becoming Bears**

Future Ag Bears choose Missouri State for high quality experiences and value



#### **Finding their Bearings**

Mentorship encompasses success for undergraduate students

#### 29 Childhood Memories Become College Success

Siblings tackle the Darr College of Agriculture together



#### **One Step at a Time**

Plant science alumna applies lyrics to life

## **Find Your Place**



## Follow your Passion, Find your Place



The "find your place" portion of the previous Missouri State mission statement was about finding your place on the Missouri State campus. Whether that be student government, serving as a resident assistant or joining a student organization, students were encouraged to find their own place. The bears in the following pages will or have found their place in the Darr College of Agriculture.

# **Becoming Bears**

Future Ag Bears choose Missouri State Agriculture for high-quality experiences and value



Whether a student is taking steps to graduate from a twoyear college experience or coming straight to a four-year institution from high school, college is a transitional phase of life. According to the Fall 2021 enrollment summary, there are 802 Darr College of Agriculture students at Missouri State University. Growing the population of ag bears is what the College of Agriculture looks forward to as opportunities become more present to the community. Of the new ag bears coming in Fall 2022, two come for similar but different opportunities at Missouri State.

"I found that a lot of things I dreamed of in a college were all available at MSU." - Maddie Makoski

#### By: Karson Thomas

#### Sparking Interests

Maddie Makoski, a current high school senior at Republic High School in Republic, Missouri, has set a goal of earning a bachelor's degree in agribusiness with a minor in horticulture. She found her niche during her time in the Republic FFA Chapter serving as the president. Makoski came into high school with fear, however, after being a member of the agriculture program she took a liking to her agriculture teachers and realized she wanted to be that person for someone else.



Makoski in the Republic FFA greenhouse at Republic High School. Photo courtesy of Karson Thomas.

"I knew teaching might not be the best option for me, but business certainly sparked my interest," Makoski explained.

With her degree, she would like to build a business that transports agriculture equipment and feed across the United States. Giving her the ability to become the person her employees can lean on is just like the trust she established with her three agriculture teachers.

The Darr College of Agriculture quickly became her first choice after researching and touring the campus. Makoski loved the opportunities Missouri State offered her; campus living and the Karls greenhouse specifically. Stepping onto campus and being exposed to campus life solidified her choice of becoming a future ag bear.

"I was able to speak with the assistant to the dean of agriculture [Mr. Jim Bellis] and he gave me all of the information I needed about the programs, and he helped me find what I was most passionate about," Makoski said.

Makoski looks forward to new beginnings, new friendships, and learning more about something she is passionate about on a more professional level when she starts at Missouri State in the fall semester of 2022.

"I found that a lot of things I dreamed of in a college were all available at MSU," Makoski said.

#### Pursuing the Path

Kayla Bennett will be transferring to Missouri State from a junior college, Ozarks Technical Community College, in the fall of 2022. After two years of finding a home in one school, Bennett has a larger campus and student body in her future. OTC allows students to complete their general education courses at a lower cost and then transfer to a four-year institution to finish their bachelor's degree.

"I finished my general education courses at OTC and now I have started taking some ag classes here too, to get me a jump start for MSU," Bennett mentioned.

Being from the small town of Marshfield, Missouri, Bennett loves the small aspect of the Richwood Valley Campus. OTC's Nixa campus provides students with livestock handling experience, labs and a 2,400 square foot greenhouse. OTC and Missouri State have partnered to ensure students transferring to



Bennett standing outside the Agriculture Training Center at Ozarks Technical Community College, Richwood Valley Campus. Photo courtesy of Bennett.

Missouri State's campus with an associate of arts degree, will have met their general education course requirements with no hiccups in the credit transfer process.

"I chose MSU to transfer to because they take all the OTC credits that I have. They also have the specific degree that I wanted, which is wildlife conservation. I have learned that a lot of universities don't even have that

#### "I found out everyone is a tight-knit group, everybody is friendly." - Kayla Bennett

degree option," Bennett expressed.

Many students who choose the community college route utilize money funded by the nationally recognized A+ Scholarship Program.

"I had A+ from high school... Mizzou had a wildlife degree, but MSU was close to home and was a better value," Bennett explained.

Although Bennett enjoys her time at the smaller OTC campus, she is excited to start her journey as an ag bear at Missouri State.

After attending a Transfer VIP Day hosted by the Office of Administrations, Bennett had a taste of what life at Missouri State may be like for her.

"Now I am excited to meet people (MSU students). I have found out it is a tight-knit group, everybody is friendly. Now I want to join some organizations and go to events," Bennett said.

#### Helping Students Find Their Place

Bellis helps students schedule their courses during the summer Student Orientation, Advisement and Registration (SOAR) sessions, and teaching the GEP 101 course for first year students and the transfer orientation course.

According to Missouri State's website, GEP is an integrative and interdisciplinary seminar that is designed to introduce students to the public affairs mission, improve students' academic skills, instill knowledge of university resources, and facilitate successful transitions to Missouri State's community.

"It is exciting to help shape their future and sit down and dream with them," Bellis proudly mentioned.

No matter where future students come from, they will always be welcome and have a place in the College of Agriculture.

"Students come here and in just a short time, fit in because they meet students that have similar goals as they do," Bellis expressed.



One of the principles of the College of Agriculture is getting involved in student organizations are among the top things both Makoski and Bennett are looking forward to most.

Making steps to come to a four-

year institution like Missouri State can be intimidating. However, as new steps are presented, future ag bears will continue to find their home away from home within the Darr College of Agriculture.



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# FINDING THEIR BEARINGS

MENTORSHIP WITHIN THE DARR COLLEGE OF AGRICULTURE ENCOMPASSES SUCCESS FOR UNDERGRADUATE STUDENTS.

Mentorship has a personal meaning to every student that walks on Missouri State's campus. The passion for agriculture creates common ground for new students in the Darr College of Agriculture, and connects them with more seasoned students..

#### **Choosing Missouri State**

For undergraduate students Rachel Grimes and Payden Nolting, the choice to come to Missouri State was an easy one.

"A lot of people that I grew up with and saw as mentors attended the college. They told me all the things they loved about it and their passion for the school which led me to being passionate about going there", explained Grimes.

Missouri State was the only college that Grimes toured, and she instantly knew that it was the best college for her post-graduation plans. Working in a public school system teaching high school students about agriculture is where Grimes wants to be.

#### **Passion for Agriculture**

Growing up in the small town of Archie, Missouri, Grimes' passion for agriculture stems from five generations of farmers.

"Agriculture has always been a really big part of my family. I

#### By: MacKenzie Larsen

am a 5th generation farmer and I honestly have no idea what it would be like to live without a farm", explained Grimes.

Being raised in Lamar, Missouri, Nolting's love for agriculture started from her family's cow-calf operation and her love for showing pigs.

#### Peer Mentorship within the College

Grimes' passion for producing and advocating led her to studying agriculture education with a minor in agricultural communications and animal science. In her first year as an undergraduate student, Grimes involved herself in three different campus organizations fostering relationships and mentors in her college career. Joining Missouri State's Cattlemen's Association introduced her to upperclassman Kendra Betz. Grimes explained that the friendliness and guidance from students like Kendra have been impactful on her college experience. Through campus organizations, Grimes gained mentorship through other peers within her organizations.

For Nolting, being involved in MSU Cattlemen's Association, Block & Bridle, Farm Bureau and Sigma Alpha led her to creating meaningful relationships with peers and faculty.

#### "I HAD MY HEART SET ON MISSOURI STATE." - RACHEL GRIMES

"A lot of the same people are in my clubs, so that's nice to be able to connect and run around with the same type of people," said Nolting.

Creating a sense of community through peer mentorship is something that the Darr College of Agriculture continues to do throughout the years for underclassmen.



2022 Bear Round Up. Photo courtesy of Payden Nolting.

#### **Teacher-Student Mentorship**

Introductory classes are students' first experiences with faculty in the college. Upon choosing her minor, Grimes met Katelyn McCoy, a professor of Agricultural Communications.

"If I was super stressed out, she just wanted to hear what I had to say. If I needed to rant, I could just rant," explained Grimes.

During her advising meetings, she appreciated feeling like she mattered rather than feeling like "a paycheck". Grimes claims that one of the best parts of the Darr College of Agriculture was the willingness of the professors to provide opportunities and life advice.

Nolting has had very similar experiences with her professors and advisors. She expressed how she confidently knew that if she wanted to accomplish something, the advisors and professors within the Darr College of Agriculture would help her find a way to do it.

The friendly faces of advisors and faculty within the college are imperative and influential to the success of underclassmen.

#### Bringing it Together

At the core of any successful underclassman student is the mentorship of faculty and peers within the Darr College of Agriculture. The opportunities that arise and the support that is given is fostered by the relationships the college provides. Like Nolting said best, being a part of the College of Agriculture family is a blessing.



2021-2022 MSU Cattlemen's Board & Officers. Photo courtesy of Rachel Grimes.

## CHILDHOOD MEMORIES BECOME COLLEGE SUCCESS

Siblings tackle the Darr College of Agriculture together

By: Karson Thomas

**G**rowing up making pencil marks on the inside of the door frame at home to making marks in the Darr College of Agriculture together is a unique opportunity. The College of Agriculture quickly becomes a second family to most students who walk the halls of Karls, but for some students their family follows them to school. They can make the college years easier by having a familiar face in the hallway.

#### BRITTANY (WILKERSON) AND NATHAN EAGLEBURGER

Hearing laughs bursting from the student activities room on the second floor of Karls Hall. Brittany runs up the stairs excited to be surrounded by fellow students in the College of Agriculture. Not only did she get to spend her time, "goofing around and playing games," with her friends in this room, but her brother, Nathan, was there with her during her freshman year of college. Growing up near Buffalo, Missouri, on their family farm, it was an easy call to make the College of Agriculture a second home for Brittany and Nathan. Commuting every day and continuing to help their parents on the farm was ideal. In the year of 2013-2014, Brittany was a freshman and Nathan was a senior, both milestone years. Being



Nathan as the Missouri Angus Ambassador and Brittany as Missouri Angus Queen during their "college years" in 2013. Photo courtesy of Brittany Wilkerson.

a freshman, it could've been hard for Brittany to get involved at Missouri State, but having her older brother there made it easier to jump in. The Eagleburger siblings were involved in Block and Bridle, Collegiate FFA Chapter, Missouri State University's Cattleman's Association, and Collegiate Farm Bureau.

"My main encouragement to join them in the first place was the fact that my brother was in them," Brittany mentioned.

When choosing a college to go to, Brittany already knew how great of an atmosphere Missouri State and the College of Agriculture had because of Nathan's experience.

#### "MY MAIN ENCOURAGEMENT TO JOIN Clubs the first place was the fact that my brother was in them." - brittany wilkerson

The pair comes from a family full of passion for the agriculture industry and the College of Agriculture. Having a mother that is alumna of Missouri State, it was easier to get involved during college and beyond. "We have been taking cattle to the Block and Bridle show for years even after we graduated," Nathan proudly exclaimed.

#### "WE HAVE BEEN TAKING CATTLE TO THE Block and bridle show for years Even after we graduated." - Nathan Eagleburger

Nathan graduated with bachelor's degrees in animal science and agribusiness, while Brittany graduated with a bachelor's degree in animal science with an emphasis in food safety. Both are now progressing their careers; Nathan is working for the City of Springfield and excited about the future of expanding his cattle operation close to home while helping his parents on the family farm. Brittany married an alumnus of the College of Agriculture, Zak Wilkerson, and has moved to Kansas where she works for PBI Gordon as a state regulatory affairs specialist. No matter how far apart the Eagleburgers live, their relationship and Missouri State will always be a common thread in their careers and their hearts.

#### JESSICA AND MATTIE COBBAN

For some, having a sibling is having someone to pick on every day. Going to college together gives siblings more opportunities.

"I pass her in the hallway in Karls and I nudge her to scare her in the hall. The person next to us is like, "whoa", and I'm like, yeah, it's okay, it's my sister," Mattie explained.

Growing up in Fair Grove, Missouri, sisters Jessica and Mattie were heavily involved in 4-H showing dogs around the country. Having a 3-year difference in school, they were used to going to school together and seeing each other in the hallways. When college rolled around for them Missouri State was an obvious choice as their family already had a special relationship with the College of Agriculture. Jean Cobban, the administrative assistant



Jessica and Mattie Cobban pose with MoMo and Smooch for the River King Regional Dog show in October 2021. Photo courtesy of Mattie Cobban.

for Karls Hall, is the pair's mother. The Cobbans come from a home that encouraged education, working hard to achieve goals and passion, especially from their dad.

"Our father works extremely hard... so, he's always been kind of our biggest cheerleader in a sense of doing well in school and working hard in school," Jessica said.

As the older sister of the two, Jessica achieved two bachelor's degrees and has always felt like the protector and overachiever of the two siblings. Mattie is thankful for all the advice Jessica shared as she started college three years later. After taking a year off school and coming back to complete graduate school, Jessica is thankful that Mattie is still around to keep her in the loop on new things happening.

"I definitely think we were close in high school, but once we really got into college, and you kind of find out who you are, I definitely think we grew closer together," Mattie proudly mentioned. Although it was an easy choice

"ONCE WE GOT INTO COLLEGE, AND YOU Kind of find out who you are, i definitely think we grew closer together." - Mattie Cobban

to make Missouri State home, it took both sisters time to find their desired majors. Mattie is in her undergraduate program studying animal science with minors in companion animal and agricultural business, while Jessica is in Missouri State's physician's assistant graduate program after achieving bachelor's degrees in athletic training and agribusiness. She plans to use her gained knowledge in both degree programs and apply it to rural healthcare.

> MERCER AND MARCUS MARTIN Spring 2022 | 33

Having only a two-year age gap, Mercer and Marcus agreed to be the best of friends.

"Marcus has always been kind of like my best friend," Mercer, the older brother, mentioned.

Being complete opposites, the Martin brothers found common ground in choosing Missouri State as their new home. During high school the two were close, but attending college together made them flourish. "It's really cool because I feel like Missouri State really set us on a trajectory of connecting even deeper," Marcus mentioned.

Mercer and Marcus were

#### "IT IS REALLY COOL BECAUSE I FEEL LIKE MSU REALLY SET US ON A TRAJECTORY OF Connecting even deeper." - Marcus Martin

involved in Chi Alpha ministry, Ag Ambassadors, a group of students who work together as spokes people for the College of Agriculture. Student organizations and degree programs majorly prepared Mercer and Marcus for life after graduation. Not only did the opportunities given and classes help prepare the brothers, the atmosphere of the College of Agriculture created comfort for Mercer and Marcus. "I think the College of Ag was

#### "I THINK THE COLLEGE OF AG WAS A Place where I was able to feel at Home... That set me up for success." - Mercer Martin

a place where I was able to feel at home... That set me up for success," Mercer expressed.

After being involved in Chi Alpha and having such a passion for Missouri State, Marcus and his wife are now serving as campus ministers through the fellowship program. As a campus minister he is planning on giving back all the incredible memories and experiences he gained at Missouri State to those involved in his program. Following graduation, Mercer's path took him to Washington University School of Law. He is now an attorney for the U.S. Bankruptcy Court for the Northern District of Texas.

Growing up together, growing closer to each other in college and making new "family" at Missouri State is something that the Martins will not forget.

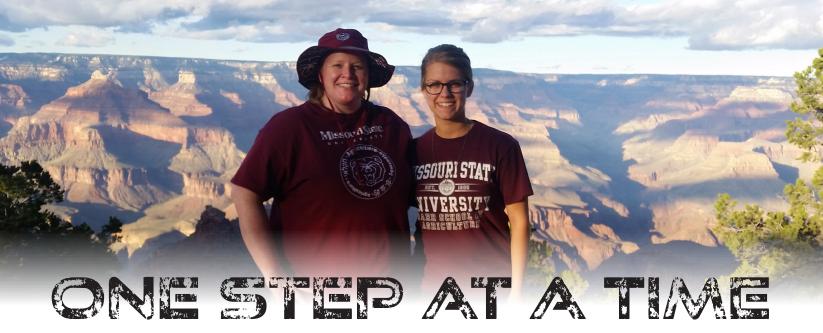
#### **BETTER TOGETHER**

As the pencil marks get higher on the inside of the door frame and start to plateau its evident to see time grows everyone. For the three sets of siblings who chose Missouri State as their second home, the journey of college helped grow their relationships. The Eagleburgers, Cobbans and Martins are just a few of the pairs of siblings who have found their place within the walls of Karls hall.



Marcus and Mercer with Boomer Bear at a Missouri State football game. Photo courtesy of Mercer Martin.





Plant science alumna applies lyrics to life

Tt wasn't the first, and it wouldn't be the last time a masterfully intelligent, young, ambitious girl walked into one of the most inviting offices in Karls Hall. The walls lined with bookcases, piles of neatly stacked papers - graded and not, surrounded the desk. Two well-loved purple armchairs sat by the door along with a collection of binders neatly labeled. It wasn't the items but instead the person to whom these objects belonged that made the true impact on the life of Dr. Jerri Lynn Henry, an alumna of the Darr College of Agriculture.

"She always knew how to make me smile, especially on the hard days," Henry said.

One day during some frustrations Henry walked down the hall to find her. As soon as she did, she could hear a gentle hum beginning, "One step at a time, just one step at a time..." Henry gave her squinty-eyed smile as Dr. Bledsoe, her academic advisor began to sing the classic by Brenda Lee. There was something about Bledsoe, professor of environmental plant science and natural resources that made Henry feel right at home. At least once a week for the entirety of graduate school she would join in with Bledsoe to sing about taking life's journey one step at a time. Typically the two found themselves singing over frustrations or grading papers. Each time the chorus began they sang their own version (Henry with Jordin Sparks,

Bledsoe with Brenda Lee) and the complexities of the situation seemed to disappear. No matter the version, the meaning was the same.

A single chorus changed the life of Henry during her college experience at Missouri State from 2013-2017.

"It began as a joke, but it

#### By: Andi Atkisson

was applicable to life," Henry mentioned. Bledsoe often sang these lyrics to Henry, leaving an impact that would last longer than her undergraduate career.

#### THE TREK BEGINS

Henry's collegiate connection to Bledsoe began during Henry's first week of class when she

discovered her academic advisor was in the Biology Department, but her degree wasn't. Henry was not afraid to go looking for a way to solve her problem. Determined to figure out who could serve as her advisor, Henry traveled to the office in Karls, Room 201 to speak to Mr. Jim Bellis, assistant to the dean. With his assistance she was directed to Bledsoe who was a new professor in the Environmental Plant Science and Natural



Resources Department.

"I was excited to have Bledsoe as my advisor; I thought we are both new here, this will be great," Henry remarked.

From the first meeting in her office, Henry desired to be connected to the College of Agriculture.

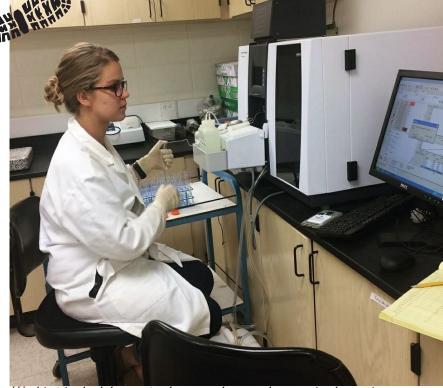
"I came to Missouri State with an interest in soil science, but it was not offered as a degree, so I chose environmental plant science with a crop science emphasis as my major," Henry said. With handson learning opportunities like studying abroad, Henry jumped in and saw agriculture through a whole new lens.

BOOTS ON THE GROUND During the summer of 2015,



Jerri Lynn Henry, Taylor Young and Brittanie DeAngelo after graduation pose with academic advisors Dr. Melissa Bledsoe and Dr. William McClain. Photo courtesy of Henry.

Henry found herself kneedeep digging a trench for the benefit of an orphanage in Pignon, Haiti. Alongside her was a group of former students and Dr. Michael Burton, professor of environmental plant science and natural resources. As they were digging in the light gray soil located in the valley of a mountain, Burton



Working in the lab as a graduate student on the atomic absorption spec. Photo courtesy of Henry.

looked up to her and asked, "Can you see yourself doing this?"

A bit taken by surprise she replied, "I can see myself doing what you do – teaching and equipping others, maybe not digging trenches though."

With a smile, he nodded, and they continued. The purpose of the trip was to use some of the sustainability practices they had learned about in school, like building terraces, keeping soil in place and irrigation so they could teach community members how to feed their families. When reflecting on this trip Henry stated confidently, "This was the place I learned what I wanted and to get there was going to take a doctorate."

#### WPHILL TO GRAD SCHOOL

After her summer study abroad, Henry returned to normalcy with classes, Agronomy Club, Sigma Alpha and a job. One day while grading papers in the laboratory, Bledsoe walks in and begins her ritual humming of, "One Step at a Time." The two smile and let out

support in her friend circles. "I enjoyed college because I was able to find lifetime friends like Rebecca (Tyler) Ward," Henry said. The two were roommates, sat next to each other in majority of classes, had the same major, were sorority sisters and both desired to continue on to grad school. Ward described Henry as, "A goal setter who works until she achieves it. She is a hard worker and determined individual."

subtle laughter. Moments of

encouragement like this kept

her grounded. Along with

faculty encouragement

she also enjoyed

The two spent many hours together in study and would continue to through graduate school. Ward was a constant encouragement for Henry when she took doctorate level courses at the University of Missouri. Ward said, "Jerri Lynn is not one to back down from a challenge." Determination allowed her to succeed in trials.

JOURNEY TO DR. During her four years at Missouri State she also completed her master's in plant science. From there she continued into her doctoral program at the University of Missouri, Columbia. As a

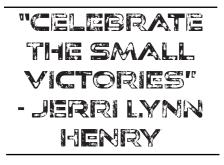
PhD student she studied the drift effects of dicamba. Her doctorate program brought new learning curves and lots of research outside of her undergraduate

courses in crop science.

#### CREATING HEAD SPACE

During an interview for her doctorate program Henry was asked what her hobbies were. "I found it hard to answer this simple question because I had forgotten to make time for myself." Henry said.

She had gotten absorbed in schoolwork and had forgotten what she loved to do. "You have to make time for yourself to make time for others," said Henry.



Since her discovery in the interview, she has found time to enjoy spending time with friends, playing with her dog and running

Dr. Burton and College of Agriculture group during Haiti study abroad. Photo courtesy of Henry.



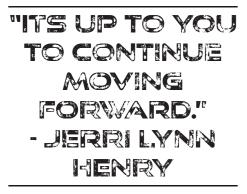
half marathons. Henry never lost her life-long connection to Ward amidst travels and life changes. Intentional time is spent between the two talking about things they enjoy and for Henry it is running.

"Running allowed me to make short-term attainable goals," Henry proudly mentioned.

During her long-term commitment to education, Henry found herself needing the shorter goals to serve as a reward when they were reached.

"I had to celebrate the small victories along the way," she added.

The first half marathon began during her doctoral studies, prepandemic in 2019. The tradition has continued into 2022 with a completion of a half marathon on April 3 and April 30. "There is no pace for success, you will have an ebb and flow of circumstances in life. It's up to you to continue moving forward," Henry said.



MAKING AN IMPACT She is now living in North Carolina working for Syngenta Crop Protection as a technical expert in field dissipation and pesticide fate in the environment. To get this position, "she fought, took risks, followed her interest and got opportunities because she worked hard," Bledsoe stated.

Life is a continuation of small steps toward a big goal. Her story showcases what you can do if you set your mind to it.

When Bledsoe clued Henry in on this, her perspective was changed on how to go about work, research and life. What began as a joke in an office of Karls Hall turned into a lifelong mantra for not only Henry but good advice for all. Life is challenging and will continue to be. Always remember the secret is to take it one step at a time.

## Make Yo



# **34** Gathering Growth, Rounding Up Experience

Shared passions bring students and youth cattle exhibitors together through MSU Block and Bridle



#### "Just Call Me Doc"

Dr. Salchow takes a hands-on approach to veterinary science



#### Bridging the Gap

Missouri State University offers only comprehensive agricultural communications major in Missouri



#### Is Red the New Black?

MSU research could change the game of choosing cattle breeds

### our Missouri Statement



# MAKE YOUR MISSOURI STATEMENT.

Missouri State's current mission statement is, "Make Your Missouri Statement". Understanding that every person who walks on campus can make a difference, the statement is all-inclusive to those who want to positively impact the campus community and beyond. The ideas and people in the following pages all positively impact Missouri State Agriculture and agriculture across the state.

# GATHERING GROWTH, ROUNDING UP EXPERIENCE

SHARED PASSIONS BRING STUDENTS AND YOUTH CATTLE EXHIBITORS TOGETHER THROUGH MSU BLOCK AND BRIDLE

By: Caitlin Jedlicka

A drenaline builds as the judge walks toward the show calf in the champion drive. Hearts are beating faster, but time seems to stand still until the showman is brought back to reality as the judge slaps the calf and shakes the exhibitor's hand. The showman just won the MSU Bear Roundup, a livestock show that has been around since 1991.

Missouri State Block and Bridle is a student-run organization comprised of any student that has interest in the livestock industry, agriculture, and specifically the show industry.

"Being open to anyone with a passion for agriculture, youth, and livestock, we truly are a group that comes together around our love for all these things," explained Kathryn Zuzack, president of MSU Block and Bridle.

Block and Bridle also allows students to network with industry professionals who will become part of their network for future careers and endeavors. The club strives to promote animal science professions while educating students through hands-on experiences. One of the many ways students do this is by hosting the MSU Bear Roundup Jackpot Show annually in March.

"The experience that students

can gain from just assisting in our show or coming out to work with the cows out at Darr, they can build a skill set that they could use if they want to continue to stay involved in the show industry," Zuzack said.

Being involved in the planning, students select a judge, as well as secure photographers, vendors of food and supplies, and event space for the exhibitors.

#### "STUDENTS CAN BUILD A SKILL SET THAT THEY COULD USE IF THEY WANT TO CONTINUE TO STAY INVOLVED IN THE SHOW INDUSTRY." -KATHRYN ZUZACK

From the Darr Agricultural Center to Ozark Empire Fairgrounds, the MSU Bear Roundup has not only grown over the years, but has also become a sanctioned show with three different associations in order to draw in more exhibitors. The MSU Bear Roundup is held in March, the show season is just getting kicked off by jackpot (one-day cash/prize) shows. Since jackpot shows are one day, it is the perfect opportunity to get show cattle exposed to other cattle, as well as used to the show ring. Instead of having large prizes and set move-in and move-out dates, jackpot shows are "out of the trailer" type shows where exhibitors do not move into the barns and prizes are typically cash. Exhibitors can show their new animals and bond with the animal while teaching the correct way to act in the ring. Exhibitors also show older cattle one last time before they are turned out onto pasture due to being too old for purebred shows.

Livestock shows, specifically cattle shows, have been around for many years and have been a large part of the youth sector of Missouri agriculture. Rooted deeply in tradition, the MSU Bear Roundup is a showcase for youth breeding heifers and market cattle. Being held in conjunction with the Ozark Spring Roundup the last weekend of March every year, local and outof-state exhibitors bring their best cattle to compete for champion.

Just like Block and Bridle provides a place for college students that share common interests, the MSU Bear Roundup provides a place for youth from ages 8-21.

"Exhibitors start attending for the cattle show but continue to attend because of the people they meet and the friends they make," Zuzack explained.





Young Charolais showman, showing his heifer in the breed champion drive at the 2022 MSU Bear Roundup. Photo courtesy of Caitlin Jedlicka.

While the show had to be canceled in 2020 and 2021, it was back finally back in 2022, with more exhibitors than before. With a 112 head of breeding heifers entered, and 46 head of market animals entered, this year was one of the best yet.

Lucas Crutcher is a long time showman at the Bear Roundup. "It's not just a hobby, it's a lifestyle. To succeed you have to give your all to these animals and the preparation of getting them ready. The show is just the reward," Crutcher said.

Much like the youth that show as exhibitors, the show is a reward to the Block and Bridle members, finally getting a chance to see the results of all their hard work throughout the year. To the members involved with the planning and execution, the smile on the exhibitors faces and the memories they see being made are what make it all worth it.

Throughout the years the Bear Roundup has seen many changes, including the recent name change from the Bear Classic, but one thing remains - a passion for the youth of the agriculture industry. Passion drives the existence of the Bear

#### "IT'S NOT JUST A HOBBY, IT'S A LIFESTYLE. TO SUCCEED YOU HAVE TO GIVE YOUR ALL TO THESE ANIMALS AND THE PREPARATION OF GETTING THEM READY." -LUCAS CRUTCHER

Roundup and the reason for having the show so early in the season.

"It's the first one to kick off the show season," Zuzack said. "It gives the exhibitors kind of a chance to see if they want to keep doing jackpots for the year."

While the Bear Roundup may be over for the year, the work of the club is nowhere near done. Planning for next year's show as well as their own show cattle from Journagan Ranch is in full swing. Members are excited to be on the show circuit themselves this summer with MSU/Journagan Ranch raised cattle and to be learning as much as they can about the livestock industry.

Looking forward to the years to come, MSU Block and Bridle Club expects to continue seeing growth and quality increase at their Bear Roundup jackpot show, especially now that is a sanctioned show. They also look forward to growing their club in numbers as well as in passion for the livestock show industry and the youth that are the future of agriculture.

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DEPARTMENT OF

Dr. Jason Salchow takes a hands-on approach to veterinary science

hen students sign up for Dr. Jason Salchow's (pronounced Sar-grow) veterinary science class, they are in for a much more collaborative class than they were likely expecting. Salchow's class has students thinking critically, outside the box, and like a veterinarian. He utilizes live demonstrations and his experience in the industry to give students the best understanding of veterinary science he can in just a few months.

#### **Background**

Salchow is a local man, whose family has been in the Billings, Missouri area since the 1890s. Salchow continues to run his livestock there alongside his wife, Sharon, and their five kids. He is a 1991 Missouri State University alumnus, and went on to graduate from the University of Missouri - Columbia College of Veterinary Medicine in 2001.

As a child, Salchow saw veterinarians as people, "who were just helpful." To help bolster his knowledge, he would watch videos of veterinary surgery just because they were interesting. Salchow felt like he was good at science growing up and through high school, and his school's guidance counselor agreed. They tried convincing him to pursue a career in environmental science, but Salchow just wanted to farm. Eventually, he decided it would be best to go to college. "What would it hurt?" Salchow said as he decided his next step.

By: Tucker Bittick

He didn't come to Missouri State knowing his major, but settled on animal science since he found veterinary medicine so interesting.

Becoming a veterinarian had some appeal to him as he had so much respect for veterinarians growing up, so he applied. After two attempts, he got in. Salchow's dream of wanting to farm wasn't going to be shuttered by his decision to become a veterinarian. He hoped being a veterinarian would help him to supplement his own farm's income and bolster his operation.

Salchow had been graduated



Lectures for Salchow's class take place in the Springfield Livestock Marketing Center. Photo courtesy of Tucker Bittick.

from veterinary school for three years and had been practicing in the field when his phone rang. Former Missouri State professor of animal science, Dr. Dennis Schmitt, had been Salchow's veterinary science professor when he was at Missouri State, and had helped him to get into veterinary school. Schmitt was working globally on elephant breeding and was often on the road, so he needed someone to take his place teaching the class for a week. Salchow accepted the offer. Then, he got another phone call asking him to fill in again. After this happened a few more times. Dr. Schmitt. Dr. Salchow, and Dr. Elliott, head of the then Department of Agriculture, met and decided that Salchow could begin teaching the class full-time the next semester as a per-course instructor. He has been teaching the class once per semester ever since.

#### **Instructional Approach**

Salchow's approach to teaching comes from his own experience being a student for so many years.

"Having just come through many college classes and thinking about

how to start teaching this one, I wanted to make it very practical for students," Salchow said.

"We don't do it for the money, not for the career advancement, not for anything. We just get a lot of enjoyment out of students that we get to have a relationship with." - Dr. Jason Salchow

Many lecture hours are not spent on campus but rather in the Springfield Livestock Marketing Center where he can have live demonstrations for students to help them understand each concept. Demonstrations include conducting bull semen sampling, castration, milking a cow and listening to the heart beat and digestive movement of horses using a stethoscope. Students leave the class with practical knowledge.

"I didn't use the word and talk about it as much then, but as I've developed over the years what we've talked about a lot is husbandry. I felt like in veterinary medicine and even animal science that we had lost our focus on husbandry as prevention," Salchow said.

Discussion is common in his class since every group of students bring in their own experiences and opinions. Challenging students' pre-established worldviews and why they believe what they believe is another part of the class Salchow enjoys the most.

"What is enjoyable for me is to have a student that thought to say, 'Doc, I had never thought of that.' That, for me is the rewarding, enjoyable part," Salchow said.

Will Pryor is an alumni of Missouri State that is currently working as a management trainee for Seaboard Foods, the largest U.S.-owned pork company. Taking Salchow's class provided an experience he wouldn't have gotten.

"If you don't know where you're going to go in the animal science industry, Salchow gives broad advice about a variety of species," Pryor said.

Pryor was not previously interested in hogs, but Salchow's class helped him in a general sense to effectively take care of livestock, consider stress, disease prevention, and how to solve problems.

"He even ties it all together with humor. It was the most enjoyable three-hour long class I had taken," Pryor said.

#### **Forging Connections**

When he first started teaching the class, Salchow had a class size closer to twenty. As the years have gone on, however, the class has expanded into the forties or fifties. Since the pandemic has began, however, he has returned to a smaller class size and thinks it has become easier to connect with the students again.

"We don't do it for the money, not for the career advancement, not for anything. We just get a lot of enjoyment out of students that we get to have a relationship with," Salchow said.

Due to Salchow's involvement in the agriculture industry with his own personal business. he maintains many of these connections outside the classroom.

Outside of class, Salchow keeps himself and his family busy. They graze cattle and sheep, raise hogs, and do custom grazing for other people. While this is his primary occupation, he also uses his education to provide veterinary services to the Four-State Stockyards in Exeter, Missouri. Even with other tasks, Salchow continues to teach his class.

"We have former students we do business with and still mentor after years. If we can take a biblical word, we are just trying to be good counsel," Salchow said.

Likely due to connections. Salchow has been told by students who aren't in an agriculture major that the entire college has a warm, welcoming feel to it. Salchow even asks students to, "just call him Doc."

Part of the reason connections are so strong has to do with how Salchow's wife, Sharon, and their five kids all pitching in to help teach the class. Sharon may be running the computer while the two younger boys are collecting papers so Salchow and his daughter can collectively explain the proper method to give vaccines. When the class was watching surgical castration of a bull-calf, Salchow's son was performing the operation while his daughter was holding its tail. It's all hands on deck for Salchow to teach the class.

"We're so busy that if it was just me having to do everything, we probably wouldn't be doing the class at this point in time," Salchow said.

Salchow provides a unique perspective to students who are wanting to go on from his class to become a veterinarian. By participating in the class and seeing what a veterinarian might be doing for a living, they're seeing what their future could look like. According to Salchow, many students who talk to him about being a veterinarian don't really know what kind of costs pursuing that career can have. He encourages anyone who wants to become a veterinarian to pursue that path, but also explains the impact it will have on their future life balance.

"I want everyone to make the best choices and decisions. And that can be hard," Salchow said.

The advice and wisdom reinforces many student's passions to become a veterinarian, though, and Salchow helps them prepare. Dr. Cody Dalton, a veterinarian who practices in Ash Grove. Missouri. has continued to remain friends with Salchow even after taking his class twelve years prior.

"I was already going [the veterinary] path anyways, but taking the class sealed it for me, really," Dalton said.

Through the class, he saw he could practice veterinary medicine outside of the mainstream path many veterinarians go down.

"Everything Salchow did was outside of the box," Dalton said.

Without the invitation to teach the class a few times for a semester from Schmitt and the approval of him becoming the instructor of the class from Elliott. Salchow would have never made the connections and relationships he now has with so many people.

"The whole reason we do this class is for the personal interactions," Salchow said.

**Bridging the Gap** Missouri State University offers only agricultural communications major in Missouri

alking swiftly through the hallway of Karls Hall, students file into the classroom for their second day of AGC 183, Introduction to Agricultural Communications. Quickly, the classroom fills with diverse students from many degree paths and experiences - some finding themselves uncertain about what agricultural communications is, others having no doubt the agricultural communications program will be their home for the rest of their collegiate career. As Darr College of Agriculture Instructor Katelyn McCoy begins her lesson by comparing agricultural communications to the Golden Gate Bridge, uncertain students begin to understand the unique role of agricultural communicators within the industry.

"I believe agricultural communications is bridging the gap between folks who don't know about agriculture and folks who do know about agriculture, and understanding that there are people in the middle," McCoy explained. "When we bridge those gaps and bring people together, we move the agriculture industry forward."

Offering per-course agricultural communications courses since the 1980s, Missouri State has developed the program over past years, establishing an official Bachelor of Science in Agricultural Communications in 2018. Research conducted by agricultural communications graduate student, Taylor Allee, emphasizes Missouri State's status as the only comprehensive agricultural communications program in Missouri. While other comparable universities may include a minor or emphasis in the field within their agricultural business or education degrees, Missouri State houses the only extensive program resulting in an agricultural communications major to undergraduate students.

#### **Creating a Jack-of-All-Trades Program**

Graduating with a Bachelor of Science degree in General Agriculture with an emphasis in communications, McCoy has experienced the evolution of the agricultural communications program throughout her roles as a student, graduate student, and instructor at Missouri State. She reminisced on the single agricultural communications course offered by Joyce Cutright when she was an undergraduate, which established The Ag Review – a news-style publication for the College of Agriculture. At the time, additional course requirements included general agriculture courses along with courses from the Communications Department which taught effective listening, group communication and other soft skills.

#### By: Katy Grant

"We made sure we carried some of those principles over from the communications program, but it was very different back when I took classes before graduating in 2014," McCoy elaborated. "I wanted students to leave Missouri State versatile and well-rounded so they could walk right into a career able to do the technical things."

"When we bridge those gaps and bring people together, we move the agriculture industry forward." - Katelyn McCoy

Providing a balance of technical skills and soft skills, the agricultural communications major requires courses using communications mediums including photography, videography, social media management, writing, graphic design, magazine production, web design and public relations to ensure students are equipped with the skills needed to pursue a career in the agriculture field.

"We come out of the program really well-rounded with all the skills from classes we take throughout the program," said Allee.

#### Hands-on Learning Opportunities

Hands-on experiences remain at the heart of the Missouri State agricultural communications program as instructors strive to shape students into career-ready individuals by providing them with real-world opportunities. According to Allee's graduate research, the agricultural communications program consists of 21 students with either a major or minor in agricultural communications, allowing for small class sizes, project-based coursework and individualized opportunities.

"Being an up-and-coming agricultural communications program and a fairly newly established program gives us the unique position of focusing on outside experiences like internships and practicums, versus all coursework," McCoy mentioned.

It is important to McCoy that students build a diverse portfolio by the time they leave the program, which is a requirement of the endof-program course called Capstone in Agricultural Communications. Portfolios include projects created by each student throughout their time in the program - photos, videos, public relations campaigns, design work and more - all published to a website created themselves. Another component of students' digital portfolio is the College of Agriculture publications every agricultural communications major writes stories for - The Darr Difference, a feature magazine, and The Ag Review, a news publication.

"One of the most influential things about our ag comm program is the resources we have, whether that be our educators, Katelyn McCoy and Dr. Kelsi Opat, with the wealth of knowledge they have, or our equipment," Allee added.

With resources including a plethora of communications equipment such as cameras, camcorders, lighting, microphones, and software, the program equips its students to succeed in courses and the industry. With many projectbased classes, students experience off-campus photography and videography shoots, as well as interact with real-world clients. In addition, agricultural communications students look forward to adding value to the College of Agriculture as an internship is being developed to assist with social media profiles and marketing for COAG Days – a week of events hosted annually by College of Agriculture organizations.

#### **Developing Skills Within the Industry**

A unique opportunity in Missouri State's agricultural communications program is working in the media room at Missouri FFA Convention. This relationship with the Missouri FFA Association allows students to submerge themselves within the industry through the Event Communications for Agricultural Organizations course. Throughout the spring semester, students learn formatting techniques, practice AP style writing and prepare press releases for the convention, while also participating in the chaotic, quick-paced press room during convention.

"It's really cool to have the media room experience of writing press releases; you know how to work on a quick deadline, you're concise in your writing and it teaches you skills



that look good on an application," said Anna Gipson, former head editor of the FFA media room and Missouri State agricultural communications alumna.

According to AG Careers, the future market for agricultural communicators is increasing, so opportunities to develop skills in the industry is critical when standing out to employers. Participants of the FFA media room encourage all agricultural communications majors and other agriculture students to participate at least once during their college career since it is such a valuable experience only Missouri State students receive.

"It's a very unique opportunity because we give them the chance to go out into the industry," explained Gipson. "It creates a unique environment for students to learn because everything at MSU is very much hands-on and I think that's what I valued most."



Kathryn Zuzack and Tucker Bittick work on a group activity in Online Communications for Agricultural Organizations class. Photo courtesy of Taylor Allee.

#### **Creating Good Communicators**

As agricultural communications becomes known and increases in popularity across the state, it will be crucial that the program continues to grow through recruitment efforts and conversations. The Missouri State agricultural communications program has been humbled to host the MSU State Agricultural Communications CDE for high school students, serving as an extraordinary recruitment opportunity for the new agricultural communications major. As a straight-to-state contest, all teams compete at the state level, hosted on the Missouri State campus







Agricultural communications minor Faith Middendorf taking photos for her Agricultural Photography class. Photo courtesy of Katy Grant.

rather than State FFA Convention, with winners still being recognized on stage. While agricultural communications may not be a major one desires to pursue, all agriculture students – high school and college – are encouraged to take communications electives to better themselves as communicators.

"We use communications whether you're in animal science, plant science, or agribusiness, and understanding how to do that more effectively and efficiently is what ag communications can offer students," McCoy mentioned. "It will also set you apart in the workforce and your job search because people are looking for employees who can communicate well."

With potential jobs from communications specialists to freelancers and everything in between, agricultural communications has a promising potential for growth within the industry. According to Zip Recruiter, Missouri has an aboveaverage salary for agricultural communications positions at \$63,339 versus the nation-wide average of \$61,212, showing the increasing potential of agricultural communications-related positions in Missouri alone.

While agricultural

communications students hold a small, but mighty, presence in the College of Agriculture at Missouri State, the program is expected to grow in the years to come as more students see the hands-on approach of the program along with the job opportunities available to pursue post-graduation. As an advancing program with new course offerings, more students will find their home in the agricultural communications program as they fall in love with telling the agriculture's story through different mediums.

"It's [the FFA Media Room] a very unique opportunity because we give them the chance to go out into the industry. It creates a unique environment for students to learn because everything at MSU is very much hands-on and I think that's what I valued most." - Anna Gipson

"If I hadn't found ag comm, I would probably still be working on finding my niche in agriculture and within the College of Agriculture," Allee realized.



*Graduate Assistant Taylor Allee helping student Kylee Faust with Adobe Premiere Pro software after class. Photo courtesy of Katy Grant.* 

A few years later, finding themselves reflecting on the unique experiences and opportunities the program has offered them, students who attended Introduction to Agricultural Communications find their way to another classroom for AGC 493, Capstone in Agricultural Communications. Applying a culmination of the technical skills learned throughout the unique program and hands-on experience, students in their final semester now challenge themselves to become the same bridge agricultural communications was compared to during the second day of their first agricultural communications class. Uncertainty that once existed in their minds was calmed, knowing that now they are beyond prepared to be immersed into a career in which they are confident success will follow. As Missouri State graduates depart to create a legacy for themselves, the program which shaped them will be developing a legacy of their own as the only agricultural communications major in Missouri.

"If I hadn't found ag comm, I would probably still be working on finding my niche in agriculture and within the College of Agriculture." - Taylor Allee

"I can't wait to come back years down the road to talk with Katelyn about how the agricultural communications program has grown since I've been gone," Allee said. "It's an outstanding program that I hope more students find to call their home."



Instructor Katelyn McCoy and Graduate Assistant Taylor Allee teaching the Media in Agriculture class. This class is a program requirement highlighting video and audio production through hands-on projects. Photo courtesy of Katy Grant.

# Is Red the New Black?

MSU research could change the game of choosing cattle breeds

By: Tucker Bittick

he American cattle herd is predominantly black hided. Among the explanations regarding breed associations, sales pricesand personal preference, one point remains true: studies have shown that black cattle stay cooler.

It goes against common perceptions that a darker animal would stay cooler, and Dr. Adam McGee, assistant professor of animal science in the Darr College of Agriculture, wants to find out why.

"When we think about colors, you think, 'If I want to stay warm, I wear a dark colored coat because it absorbs the light and absorbs heat.' When I was in graduate school, there was a research paper that was presented and they found that the red-hided cattle were actually hotter than the black-hided cattle. I remember listening to that, that

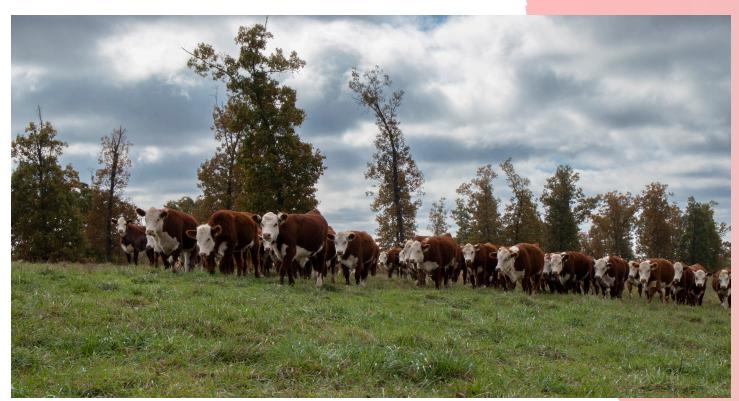
there's something wrong and it can't be right," McGee said.

McGee teaches most of the beef cattle classes and is trained as a ruminant nutritionist with an emphasis on the cow-calf side of the industry. Since cattle that are too hot to graze are costing producers money, interest was sparked in wanting to conduct this research. This is what sparked his interest in wanting to conduct this research since cattle that are too hot to graze are costing producers money. Heat stress has the consequence of reducing productivity. Cooler livestock can lead to more growth because they will spend less time in the shade and more time grazing.

"That's the way my research typically is, and it's the way I want to see my research go. I am here to help the producers," McGee stated.

#### **Research Principles**

To conduct this research, McGee is going to be utilizing CIDR (controlled inner drug release) implants that, instead of containing progesterone, contain a data logger that will monitor the internal temperature of the cow every five minutes for two weeks. They will be implanted into herds of lighter and darker colored Herefords as well as a herd of Black Angus cattle. Data will be recorded, loaded into a spreadsheet and analyzed after the testing is done. GPS tracking collars are hopefully going to be placed on some of the cows. These will be fitted around a cow's neck and will track their positions within a pasture to determine whether the cattle have gone to shade, out to graze, to water or to lie down. While the main principles of their research



A herd of Hereford cattle at Journagan Ranch. Photo courtesy of Tucker Bittick.

are already determined, McGee has also considered clipping hairs from the test herd to determine a correlation with hair density, size of the hair follicle or numbers of hairs per square inch.

McGee is hoping to determine if there is a behavior difference between red-hided and black-hided cattle that is leading to the latter being cooler. He has experience conducting this type of research, but this study should reveal more information than has been collected in the past. He helped conduct a small study at Abilene Christian University in Abilene, Texas, and had similar results. McGee hoping the size and resources of Journagan Ranch, Missouri State University's Hereford cattle ranch, will provide better context to what causes these results. Research may also determine if there are variations within the Hereford breed.

"That's the way my research typically is, and it's the way I want to see my research go. I am here to help the producers." - Adam McGee

"Our goal is to look at the difference between light-red Herefords and dark-red Herefords. Is there a genetic difference or a genetic marker that we can start tracing and start looking back through? If we can pick up differences between sired and damed lines, then we can go back say there might be something here."



Dr. Adam McGee and CarrieLee Holliday outside the Bond Learning Center. Photo courtesy of Tucker Bittick.

#### Hands-off

Research is expected to take place July 2022, which is the hottest part of the summer for Missouri.

"I think we'll have three times where we'll have to catch the cows. Nobody has to be out there watching the cows, they're constantly being recorded. We can pull that data and spend time analyzing it," McGee stated.

Though research is being conducted by Missouri State, the research tools needed are not all owned by the university. To assist in this effort, Dr. Jeff Carroll of the USDA Livestock Issues Research Laboratory will be lending the CIDR implants. The system he utilizes will allow for the research to be fully compiled and organized so that McGee and others can focus on what the research is telling them and not spend countless hours organizing random data.

There is not any use in research that doesn't make it to the public eye. Graduate student CarrieLee Holliday is excited to be helping with the project. She will be working on the project with McGee, ensuring the cattle herd is properly taken care of during the experiment. She will also be sorting through data to determine results. Holliday hopes she and McGee will be able to present their findings in February at the southern section of the American Society of Animal Science Annual Meeting & Trade Show in Oklahoma City, Oklahoma.

"I would love to be able to formulate our data with the help of the board and present that for not only my master's thesis, but as McGee's graduate student, a cattle producer, and as a Missouri State student," Holliday said.

The color of cattle may not seem important at first glance, but the margin of profit in the cattle industry seems to always be decreasing. Having efficient herds of cattle is necessary to a producer's success. McGee and Holliday hope their research can be used by ranchers to make the best decisions for their own operations and keep the Missouri cattle industry strong.



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