

AGRI LEADER

TEXAS A&M COLLEGE OF AGRICULTURE AND LIFE SCIENCES
VOL. 16 • ISSUE 1 • FALL 2017

SEEDS OF SERVICE:

Growing hearts of selflessness
one jar of salsa at a time



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what you eat*

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from the skies*

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Dr. Pfannstiel*

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Antibiotics*

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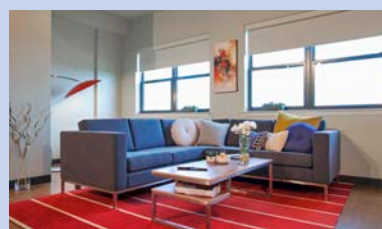
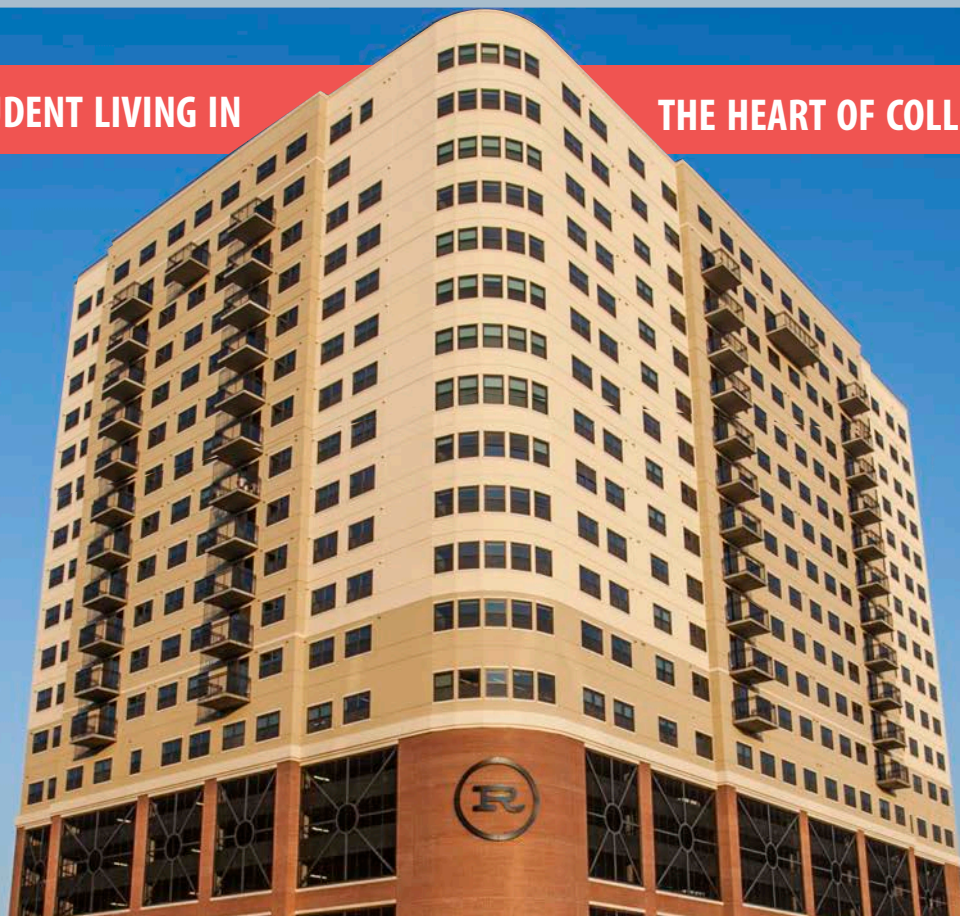


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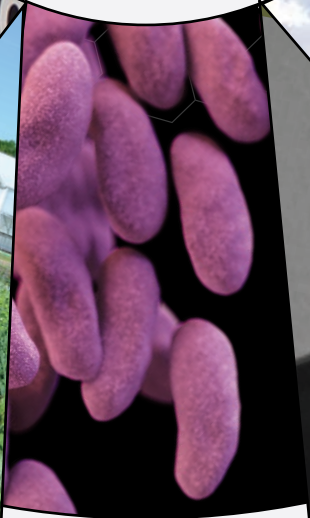


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MEET THE

STAFF

Jenna Garrett



Katie Aupperle



Allison Taff



Lauren Zajicek



Parker Brown



Ashlie James



Ben Haase



Shelby Catron

Lauren Flint



Kelsey Miller



Katelyn Wallace

Readers,

You will find two ideas woven into this issue of the AgriLeader that are very important to our staff – food and future. These topics are the foundation of agriculture and are very important subjects we strive to research and improve upon in the College of Agriculture and Life Sciences. Food fuels our minds and bodies and makes up a large portion of jobs in the agriculture industry. The next generation of farmers and food manufacturing technology is the future of the industry.

Seeds of Service highlights our students teaching children to be good stewards of the land through an after-school gardening class. S.O.S. volunteers are instilling a sense of appreciation for farming in the next generation. Fresh in Fall highlights crops that are bountiful in fall and gives insight to the requirements of gardening in the abundant season. Aporkalypse explains the bacon shortage scare that pork producers faced, which caused a bacon surplus for our nation.

The future of farming is ever-changing and apparent in Watching from the Skies, a story highlighting the use of drones in crop farming. Failing Antibiotics gives a glimpse into the daunting reality of antibiotic resistance and the troubled future that we may enter if we do not adjust our implementation of these medicines. The Lost Pines Aren't Lost focuses on the future of Bastrop's forests following the fire that destroyed their pines many years ago. Replanting efforts by volunteers are ensuring a brighter future for the once devastated forest.

I want to thank the staff for their hard work and determination in procuring excellent stories and photographs. Those on leadership staff were diligent and eager to help. Special thanks to our graphic design editor, Shelby. In the end, she made us all look good. I also want to thank Lauren Rouse, Justin Walker and Stacey Dewald for guidance and valuable advice. I hope you enjoy this issue of the AgriLeader as much as we have enjoyed producing it.



Heather Gillin

Heather Gillin

Emily Berger



Megan Haas



Madison Brickham



Selena Arndt



Claire Huerta



Morgan Moreno



Leah Bauer



Siobhan Hilliard



Bre Magott



Emily McKinney



Happy Harvesting

Royalty Pecan will hold festival in November

This November, residents of Bryan/College Station and Caldwell will gather to celebrate the pecan harvest season at this year's annual Royalty Pecan Harvest Festival.

Royalty Pecan Farms, located at 10600 State Highway 21 E., is a family-owned and operated pecan farm between Bryan/College Station and Caldwell. The farm is an event venue and also features a gift shop that will remain open during the festival.

Royalty Pecan offers educational tours during the Harvest Festival through the 500-acre pecan orchard that leave every 30 minutes from 10 a.m. to 4 p.m. The purpose is to educate adult and children visitors about sustainable agriculture, pecan growing and the harvesting process.

Welcome Center and Venue Manager Rebekah Stallsworth said, "The whole point of the tour is to teach people about the growing model that we use, which is sustainable agriculture, that is what everything is focused around. We talk about how we implement it into the different areas of growing the crop to help people understand."

Other activities at the Harvest Festival include live music throughout the day, vendors such as local



Photo courtesy of Royalty Pecan Farms

artisans and small businesses, and a live reptile exhibit. The reptile exhibit is put on by Reptile Hospice and Sanctuary of Texas, a non-profit organization based in Snook, Texas, that rehabilitates and takes care of reptiles for educational use.

Royalty Pecan Farms held their first Harvest Festival five years ago in 2012, by request of the pecan orchard's owner, to highlight and educate the public about the three-month harvest season of the pecan crop.

At this year's festival, Stallsworth said the farm is looking to "ramp things up" with local musical talent and more activities. Admission to the festival and parking is free. A full list of vendors, the festival schedule and updates can be found at

<https://royaltypespecans.com/pages/harvest-festival>

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PHOTOGRAPHS

Katelyn Wallace 713.303.3009 katelyngwallace@gmail.com

You are what you eat



College is hard, eating healthy is hard and doing both at the same time is especially hard. Being in college presents many difficulties. Schoolwork, relationships, extracurriculars and jobs all fight for a student's time. Now, throw leading a healthy lifestyle into the mix.

Enter fad diets.

Facebook houses people selling diet pills and promoting diet programs. Instagram stars like Kim Kardashian and almost every contestant from the Bachelor constantly advertise teatoxes. Pinterest is covered in military diets, juice cleanses and drink mixes that curb your appetite.

Everywhere a person turns, there are weight loss options. All these options seem reasonable at first glance, especially when summer is around the corner and time is running out. The infamous freshman 15 has to go somehow, and extreme dieting seems like the only option, but is it?

Meghan Windham, a registered dietician, does not encourage diets.

“Any type of diet is not a lifestyle change,” Windham said. “In order to see long-term success, we have to incorporate a lifestyle change, not a quick fix.”

Windham points out that we live in a society where it is easy to get sucked into the idea of losing 5 to 10 pounds in a week, even when that weight loss is not healthy.

Heather Morris, a registered dietician and personal trainer, echoes Windham’s thoughts on fad diets.

“Sure, people have seen results but once they resume their normal eating habits the weight nearly always packs back, on plus additional fat and pounds as their bodies respond to the swings in metabolism,” Morris said. “Constantly changing eating habits or flip-flopping back and forth each time the next big thing shows up on the screen will absolutely lead to metabolic disaster.”

It’s simple. Fad diets do not work in the long run. To see lasting results a person has to make a lifestyle change.

“Start small,” Windham said. “We often look at the end goal. But if you don’t start small and you always focus on the bigger picture, we’ll never get there.”

Morris pointed out that it is always important to keep perspective and focus on personal goals.

“Your journey will not be the same as anyone else’s and your struggles are what truly make you stronger and should fill you with the most pride after you have reached a milestone,” Morris said. “No one can do it for you, so look deeply within to find the true reason that pushes you to become or remain healthy and always go back to that when the going gets tough.”

Morris suggests taking on a mindset of eating to live rather than living to eat.

“Feed your ‘machine’ how you want it to perform,” Morris said. “Junk in equals junk out, low energy in equals low energy out. Super restrictive plans will almost certainly lead to failure as they are not feasible to maintain while also enjoying life, because no one enjoys deprivation.”

“And in order to see long-term success we have to incorporate a lifestyle change, not a quick fix.”

“Healthy lifestyles are attainable by everyone but major changes do not happen overnight.” Morris said. “You must be willing to put in hard work, be consistent and sacrifice on occasion.”

So what does hard work entail?

Windham, who works specifically with students at Texas A&M University, has a specific approach she uses with each student: assess their background, beverage intake and food intake, and then build small changes from that.

Morris’s tips for a healthy lifestyle:

1. Set your goals. Keep them realistic, set both short and long-term goals and decide how you will gauge your progress.
2. Make a plan that allows you to have fun while still making progress. Include your friends or family, places you like to frequent and choose types of exercise that are enjoyable and keep you entertained.
3. Plan your meals, your exercise and your time to allow some flexibility while maintaining structure so that if you have to vary all is not lost. Look for ways to stay on track and do not self-sabotage by being lazy or complacent.

TOTAL DIET APPROACH TO HEALTHY EATING

The foundation of a healthy lifestyle includes physical activity and consuming a balanced variety of nutrient-rich foods and beverages in moderation. The Academy of Nutrition and Dietetics refers to this as the total diet approach to healthy eating.

DIETARY GUIDELINES FOR AMERICANS (DGA)

DGA defines "total diet" as everything a person eats averaged out over time – it's the combination of all foods and beverages that give people energy and nutrients. Most adult Americans do *not* meet the DGA recommendations.

82%	DON'T WANT TO GIVE UP FOODS THEY LIKE in order to eat healthier
68%	DON'T EAT FRUITS OR VEGETABLES at least twice per day
62%	HAVE NO TIME TO TRACK THEIR DIET in order to eat healthier
60%	JUGGLE BOTH WORK & FAMILY, PREFER to prep meals in 15 min.
36%	HAVE NO LEISURE-TIME PHYSICAL ACTIVITY

FACTORS THAT INFLUENCE EATING PRACTICES:

- Taste and food preferences
- Weight concerns
- Physiology
- Time and convenience
- Environment (home, school, workplace)
- Abundance of foods
- Demographic factors (age, socioeconomic status, ethnicity)
- Media and marketing
- Perceived product safety
- Culture (heritage, religion, body image)

SUPPORT FOR THE TOTAL DIET APPROACH

DASH • Dietary Approaches to Stop Hypertension (DASH) • Eating plan consists of healthful food choices over time • Endorsed by U.S. Department of Health and Human Services	USDA • The U.S. Department of Agriculture (USDA) • MyPlate Food Guidance System features a SuperTracker that creates a personalized plan with total diet and physical activity	LET'S MOVE • Campaign launched by the White House • Aims to reduce child obesity by improving the overall quality of children's diets and increasing physical activity	These programs encourage Americans to choose nutrient-dense foods and beverages, and reduce intake of saturated and trans fats, added sugars, sodium and alcohol.
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------

It boils down to making wise food choices in the context of the total diet. Registered dietitian nutritionists can help establish a healthy lifestyle by teaching people to focus on variety, moderation and portion sizes.

eat right. Academy of Nutrition and Dietetics
 Position of the Academy of Nutrition and Dietetics: "Total Diet Approach to Healthy Eating" (February 2013)

One tried-and-true health platform is MyPlate. MyPlate works to help people of all ages find their own personal healthy-eating style and continually build upon it.

MyPlate creates a healthy lifestyle step-by-step. By starting small and slowly building up, a person is less likely to quit or relapse. It sets out basics that people should follow. According to MyPlate, a person must focus on variety, amount and nutrition. Foods with less saturated fat, sodium and added sugars should be implemented into their diet.

According to MyPlate, eating healthy is a journey shaped by many factors: a person's stage of life, situations, preferences, access to food, culture, traditions and personal decisions. Healthy lifestyles are not one-size-fits-all. Each person requires, wants and appreciates different things in their life, and MyPlate takes that into account. MyPlate does not eliminate any food groups, but rather targets each group to get the best nutrients from that group possible.

It does not tell people to only eat 1,300 calories a day, but rather helps people figure out the appropriate caloric intake for their age, sex and weight. MyPlate takes time, persistence and practice, but it creates a great opportunity for college students to have a healthy life without having to buy diet pills, starve themselves or only eat certain food groups.

Fad diets may seem like a great way to score that beach bod, but in reality they do more harm than good. To really reach and maintain goals, people should start small, feed to fuel and remember that their journey and body is different from everyone else's. Instead of asking Siri for answers, consult an expert.



Leah Bauer '17

Photo printed with permission from AND



Recipes

Design by Jenna Garrett

PEANUT BUTTER BANANA BITES



Ingredients

2 bananas, peeled
1/4 cup peanut butter, divided
2 whole wheat tortillas

Directions

Place one tortilla on a flat surface and spread 2 tbsp of peanut butter on the tortilla to evenly coat. Place one banana near the edge of the tortilla and roll it up. Slice into 1/2 inch rounds and serve.

If your tortilla bread is stiff, you can put it in the microwave in between two pieces of moist paper towel and heat for 15-20 seconds or until softened.

Photo courtesy of Heather Gillin

CHOCOLATE CHIP BANANA MUFFINS

Ingredients

1 1/2 cups whole wheat pastry flour or white whole wheat flour
1 teaspoon baking soda
1/4 teaspoon salt
3 bananas
1/4 cup honey
1 tablespoon vanilla
1 tablespoon olive or coconut oil
1 egg
1/2 cup nonfat plain Greek yogurt
1 tablespoon unsweetened almond milk
1/2 cup chocolate chips

Directions

Preheat oven to 350 degrees F. Spray a 12-cup muffin tin with nonstick cooking spray. In a medium bowl, whisk together flour, baking soda and salt. Add bananas, honey, vanilla, oil, egg, milk and yogurt to a blender. Blend on high for 1 minute or until well combined. Add wet ingredients to dry and mix until just combined. Fold in chocolate chips. Divide batter evenly into muffin tin and bake for 20-25 minutes or until toothpick comes out clean or with just a few crumbs attached. Cool muffins for 5 minutes then remove and transfer to a wire rack to finish cooling.



Photo courtesy of Heather Gillin

STIR-FRY CHICKEN AND VEGETABLES



Photo courtesy of Heather Gillin

Ingredients

- 1 tablespoon olive oil
- 1 red bell pepper, thinly sliced
- 1 green bell pepper, thinly sliced
- 1 medium zucchini, sliced
- 1 medium yellow squash, sliced
- 1 cup fresh broccoli, chopped into bite-sized pieces
- 1/2 cup onion, diced
- 2 chicken breasts, fully cooked and diced
- 3 tablespoons low-sodium teriyaki sauce

Directions

Pour olive oil into the bottom of a large skillet and heat over medium high heat. Drop the vegetables into the skillet and cook, stirring occasionally for 4-5 minutes (or until vegetables start to turn tender). Add fully cooked chicken and heat until warmed through. Pour teriyaki sauce over vegetables and chicken and stir until completely incorporated.

Design by Jenna Garrett



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BARLEY AND FARRO PORRIDGE



Photo courtesy of Heather Gillin

Ingredients

- 1/2 cup barley
- 1/2 cup farro
- 1/4 cup dried or fresh fruit
- 3/4 cup heavy whipping cream
- 1 teaspoon vanilla extract
- 1/4 cup garnulated sugar
- optional: few tablespoons of almonds or other nuts

Directions

Prepare barley and farro according to package instructions. Pour heavy whipping cream and vanilla extract in a bowl and beat until medium peaks. Then, fold in the powdered sugar until it is incorporated. Measure out servings of each grain into a serving bowl and add in the fruits. Add a dollop of the cream and stir. The first dollop will give the porridge a creamy texture. Then add a second dollop to garnish.

Design by Jenna Garrett

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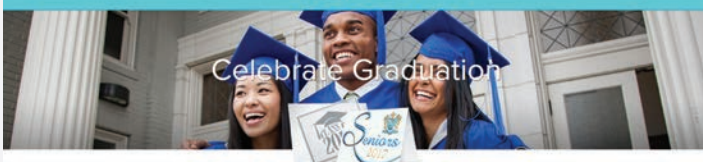
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Happy Hunting

Ducks Unlimited hosts annual banquet

The Texas A&M University Ducks Unlimited Chapter will host its annual fall banquet this November. The banquet will include auctions, a raffle and a steak dinner.

The Texas A&M Chapter has hosted this event since 1998. It was created to raise money for Ducks Unlimited, which is a wetland waterfowl conservation organization. All proceeds earned will go toward helping conserve, restore and manage wetlands for North America's waterfowl.

This year, the banquet will be held Thursday, Nov. 9, at the Brazos County Expo Center, with doors opening at 6 p.m. Anyone is welcome to the banquet and no dress code will be enforced.

Kyler Newman '15, president of the Texas A&M Chapter of Ducks Unlimited, said 650 people are expected to attend the event.

“Last year, we raised \$98,000, making us the number one collegiate chapter in the nation for 2016,” Newman said.


Each year, Ducks Unlimited awards the collegiate chapter that raises the most money at their banquet for the organization.

“We want to remain the number one collegiate chapter in the nation, so we are doing everything we can to raise the bar on this year’s banquet,” Newman said. “We want our attendees to enjoy great food and prizes while celebrating an amazing cause.”

Tickets are \$20 for students, \$40 for non-students, and \$60 for couples. Each ticket includes a steak dinner catered by Texas Country Catering, unlimited alcohol and non-alcoholic beverages, and access to the raffle and live and silent auctions.

Tickets for the banquet can be purchased online at ducks.org, or from any members of the Texas A&M Ducks Unlimited Chapter. Tickets can also be bought through Kyler Newman by contacting her at kyler_12_newman@tamu.edu



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SEEDS

of Service



Photo courtesy of S.O.S. Ministries



Photo courtesy of Heather Gillin

Sunshine beamed down as the children leaned over their garden and admired the sprouts that pushed up through the dirt. Their college student helpers worked alongside them as they uprooted the last of the weeds encroaching on their vegetables. Their work accomplished, the children ran off between the garden beds, dancing in the lush grass and enjoying the beautiful afternoon.

Each semester, Save Our Streets Ministries hosts its after-school gardening class, where children can learn the value of working together to achieve a common goal. In a society that all too often expects instant gratification, growing a garden teaches children that sometimes the best rewards are the ones that take time to receive.

Allison Dirks '15 is the children's program coordinator for S.O.S. Ministries. She said she hopes the children learn that they are capable of following through on a project that takes longer than their daily worksheets from school.

"My idea of giving them gardening is that they can see something from start to finish and realize that they can accomplish something long-term," Dirks said.

The garden includes a variety of vegetables and herbs, such as lettuce, green beans, basil and parsley. Although inclement weather and lack of volunteers posed challenges for the spring semester class, Dirks has big plans for the continuation of the class in the fall. She said that her vision is for the children to be able to plant tomatoes, peppers, cilantro and other ingredients that will be perfect for making fresh salsa.

"We want the kids to experience giving out of all their hard work. We're trying to teach them a heart of selflessness."

The semester-long salsa project will give children an opportunity to participate in creating a tangible finished product. The gardening class will grow the fresh ingredients, the cooking class will combine those ingredients into salsa, and the art class will design mason jars to dole out portions. Filled jars will then be given to both donors and the S.O.S. Ministries board of directors.

"We want the kids to experience giving out of all their hard work,"

Dirks said. "We're trying to teach them a heart of selflessness."

Agricultural roots

Taking the gardening class allows children to spend ample time outside, learning how to nurture a garden to produce food and flowers they can enjoy. Principles learned in the class, such as plant propagation and plant nutrition, reinforce the children's science curriculum and help them better understand agriculture.

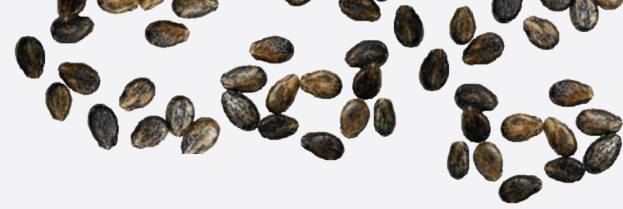
Growing their own food helps the children realize how much time and effort goes into producing it. Charlie Hall, a Texas A&M University horticultural sciences professor, said that giving children a better appreciation of where their food comes from is what it is about.

"Milk doesn't just come from a jug," Hall said. "Bread doesn't just come from a bag at the supermarket. Fruits and veggies don't just show up in a bulk bin at Kroger by accident."

College connections

Since volunteers teach the class, it fosters relationships between children and college students. For Elizabeth Paul '17, a Texas A&M graduate with a degree in allied health, those connections were invaluable. She said helping teach the gardening class allowed her





to grow closer with the children and encourage them to pursue something worthwhile.

“Families nowadays tend to stay inside more often,” Paul said. “Nobody really has gardens in their backyard, or even goes outside to play. Us doing gardening is something unique other than recess or sports, where we can get them outside to do fun activities.”

When children and college students work together in the garden, their differences do not matter. They are united in pursuing a common goal and caring about something other than themselves. Age barriers, language barriers, racial barriers and socioeconomic barriers all keep people from connecting with one another, but are mitigated when people are hunched over a garden bed with dirt under their fingernails.

“When you’re gardening, everybody’s equal,” Hall said. “When you have a shovel in your hand, there’s no difference in social

status. Everybody’s wearing the same blisters on their hands.”

Service values

For Aggies who want to find a place to serve, S.O.S. Ministries provides many different opportunities to work with inner-city families. Students can work with children through the after-school program, the nursery, the children’s ministry or the teenage boys’ or teenage girls’ ministries. Through these programs, students invest in the lives of children and can be a positive influence on them.

“I love how the kids get so attached to you and remember you,” Paul said. “You feel valued and you know that you’re doing something for them, because they clearly remember you and what you’ve done.”

For students interested in serving other age groups, S.O.S. Ministries holds a weekly adult Bible study and also maintains an active presence in local jails and prisons, supporting the men and women there. In addition, if

students are looking for a one-time service project, S.O.S. Ministries often hosts special events, such as community basketball tournaments and family movie nights, that need volunteers.

“For any college students who are thinking ‘Maybe that’s for somebody else,’ or ‘Maybe I’ll do it next semester,’ my advice has always been to jump in and do it because you’re not going to regret it — the Lord has something to teach you,” Dirks said. “If it’s where you’re supposed to be, you’ll fall in love.”

Interested students are encouraged to contact Allison Dirks at children@saveourstreetsministries.org



Emily Berger '17



W. Shawn Ramsey '90

Degree: Bachelor's degree in Animal Science, Master's degree in Animal and Range Sciences from New Mexico State University, Ph.D. in Animal and Range Sciences from New Mexico State University

Profession: Associate professor, assistant head for Undergraduate Programs in the Department of Animal Science and sheep and goat extension specialists for the State

What brought you to Texas A&M for your undergraduate degree?

I grew up being involved in 4-H. Texas A&M was the place to be. My father also attended as well as other family. I am a second generation Aggie.

How many classes do you teach now and what are they?

I teach a lot of classes. Introductory Animal Science, Sheep and Goat Production, Wool and Mohair Evaluation and Livestock Practicum. I have about 750 to 800 students. I am also the coach for the Wool Judging Team and I lead a study abroad for animal science. We are going to New Zealand to expose them to global agriculture.



Photo courtesy of Maggie Tucker

What is it like teaching a class that you took yourself as an undergrad?

I would describe it as all of the above. I think back and use things that I wish I would have known. I want to serve as a springboard. I want them to think, 'If he can do it, then I can.' It's neat. I actually took every class that I teach.

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For upcoming events, visit aggiehorsemen.wixsite.com





Photo courtesy of Erich Schlegel



The Reel Life of Tyler Anderson

T Tyler grabs his fishing gear and unloads his truck. His mind wanders to the potential success of today's catch. Setting up the tripod and strapping on the GoPro, he's ready for the day ahead. "Let's catch some bass," he tells himself.

Tyler Anderson, the man behind the popular YouTube Channel "Tyler's Reel Fishing," spends the majority of his free time fishing for bass. A sophomore telecommunications major at Texas A&M University, Tyler managed to achieve success in the YouTube space where not many excel. The TylersReelFishing YouTube channel has amassed 7,716,267 views and more than 68,000 subscribers as of April 2017. There are more than 300 hours of video uploaded to YouTube every minute, making for some steep competition.

"To be on YouTube, you have to have thick skin because everyone has an opinion," said Anderson.

With a passion for fishing, no wonder Tyler gravitated toward the digital space. Tyler recalled, as a young boy, he and his family spent a lot of time out on the lake, enjoying various water sports. The Bass Master Classic, which he saw broadcasted on television, ignited a flame in him for bass fishing.

"It was after sixth grade when I watched [the tournament] that I decided I wanted to do that for a living," Anderson said.

TylersReelFishing gained popularity due to the wide range of video content from tutorials to vlogs to bass fishing competitions.

Since joining YouTube in February 2013, Tyler gained viewers who tune in weekly to see him participate in competitions, review fishing gear and find new places to fish near and around College Station.

"YouTube is definitely a hockey stick type of growth. I gained 46,000 subscribers last year," he said.

What makes Tyler unique is his ability to balance school work and a successful YouTube channel. Many popular YouTubers who are also enrolled in college end up leaving school to focus on their YouTube full time.

Tyler manages both school and his passion simultaneously. The character of Texas A&M is a large part of what has helped Tyler to be successful during his time in school.

"The community here is fantastic. The culture promotes entrepreneurship and deep friendship," he said.

Since enrolling at Texas A&M in the fall of 2015, Tyler has been able to introduce a new type of content on his channel, vlogging, which has attracted a new type of viewer. Vlogs, or video blogs, highlight Tyler's day. The camera follows his daily routine and gives viewers an inside scoop into his life. Tyler managed to create vlogs which center around his life in college along with his bass fishing on the weekends.

"I always have shots in my head of what I want the end product to look like, but things always change out on the water," Anderson said. "I film what happens throughout my day then try to tie it together with a teaching moment."

While his bass fishing videos gain thousands of views regularly, the audience type remains the same. Men and women come to TylersReelFishing looking for insight into a great fishing spot, tips on the best new fishing lure and video content on the various bass fishing contests across the country.

The unique content of the TylersReelFishing channel brings people from all different demographics and walks of life together to experience the same videos and learn something along the way. Tyler said kids often contact him and tell him he is a source of inspiration in their lives.

"It's physically and mentally tolling, and it's the fans that keep me going," he said.

This YouTube channel does more than just educate people in what they want to learn about, but opens their minds to several possibilities for the future.

This next spring, Tyler hopes to focus on continuing to grow his channel. Having a successful year in 2016 leaves him with a lot of insight and much to reflect on moving forward to advance his career.



Ashlie James '18

1943

1,900 acres were transformed into the Bryan Air Base so pilots could train on and master the AT-6 fighter.

1946

Texas A&M University transformed the previous base into an area called the "Annex." It housed dormitories and classrooms to accommodate the overflow of students after the war.

1951

The federal government reclaimed the property during the Korean war and named it the Bryan Air Force Base. The property was used as a training complex for pilots to fly jets.

World War II ended and the base closed.

1945

Additional dormitory space was added to A&M's campus, resulting in the closing of the Annex.

The base was designated as a permanent military facility.

1950

1954



Madison Bickham '18



1958

The base became deactivated.

1982

A&M assumed full ownership of the property and it became the “Annex” or the “Research Annex.”

2016

A&M announced the addition of the RELLIS campus and construction began.

The base was declared excess government property and was later transferred to A&M.

1961

The property was officially renamed the Riverside Campus and became home to the Texas Transportation Institute and Texas A&M Engineering Extension Services.

1988

RELLIS *campus*



Photo provided by Stephanie Venn

Melissa Hering '13

Degree: Bachelor's degree in Agricultural Communications and Journalism

Profession: Morning Radio Show Host, Maverick 100.9

What do you do for a living?

I am a morning show host on Maverick 100.9. The show airs on the radio from 5 a.m. to 9 a.m. I really like that it's something new and exciting each and every day. You get to help lift people up and make them laugh. I also do sales for Bryan Broadcasting.

What advice would you give to working students?

It can be frustrating at times, but I definitely think you have to do what you have to do, especially with how much school costs these days. Time management is key. As long as you are keeping up with your schedule and making sure you're allowing time to focus on school, then you'll be fine.

What are some activities that helped your career?

The internships I was able to acquire while I was at A&M really set me apart. A lot of employers look for real life experience that you have to bring to the table. Between all of my internships, I really feel like I had that. I interned at Rodeo Houston and KBTX. I worked at Bryan Broadcasting on the promotions team. I interned at Country Radio Broadcasters in Nashville, and I also interned at a PR firm while I was in Nashville. When I came back to graduate I started here at Bryan Broadcasting on-air on the weekends.

Agricultural Communicators of Tomorrow

"The mission of National ACT is to build relationships among agricultural communications professionals, college students and faculty, to provide professional and academic development for members and to promote agriculture through communications efforts."



Contact Carly Donsbach
c.donsbach.1185@gmail.com

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WATCHING FROM THE SKIES



A farmer sets a small machine on the ground. Taking its controls, she commands it to hover above at 40-feet. The sound it emits is like that of a swarm of bees. The drone floats seamlessly before gliding over a nearby corn field, methodically taking photos of the crops. The drone's camera picks up on an abnormality located on the far side of the field, alerting the farmer upon review. After a 20-minute flight, it returns to the farmer with information that would have taken hours to obtain through traditional methods. Picking up the machine, small enough to fit in the palm of her hand, the farmer heads back to her truck to analyze the data provided by the photos, allowing her to properly care for her crops.

Drones are aircrafts minus the human pilot. They can be operated via remote or autonomously by onboard computers. Originally designed for military use, drones in the last decade have been utilized for commercial purposes. Specifically, the agricultural industry has found ways to use the machines when working with crops.

Katharine Rosser, business operations manager for FarmSolutions, knows firsthand how drones are used regularly in crop monitoring.

“FarmSolutions transforms aerial imagery into actionable information, enabling growers to detect and treat crop issues,” Rosser said. “This results in long-term savings and improved crop health.”

Rosser said any tool capable of optimizing inputs and resources helps in maintaining farm growth and keeping up with the growing population.

A publication by the Australian Journal of Agricultural and Resource Economics states that agricultural consumption will increase by 69 percent from 2010 to 2050. But Brian Hogue, CEO and founder of Arable Media — a media company that focuses on the food and agricultural industries — is confident in the abilities of agriculturalists.

“Farmers will figure it out,” he said.

Arable Media uses drones in its filming because it focuses on agricultural landscapes. In order to get video of these vast pieces of land, and engage the viewers, the company utilizes drones. On Hogue's personal farm located in Illinois, the farmers utilize drones to scout fields looking for abnormalities or signs of deficiencies. Hogue said the drones have cameras with different specters built specifically for these specialized needs that can see how the plants and fields are progressing.



“We use scout advisors who come out and scout our fields and they use drones to measure photosynthesis, stress and heat,” Hogue said.

On the FarmSolutions Avocado Farm located in southern California, drones revolutionize the way they monitor their orchards.

“Aerial imagery enables growers to see more than ever before and provides them with real-time data of their farm,” Rosser said. “We anticipate growers continuing to adapt this technology and make real decisions as a result of it.”

Many farmers are concerned with safety, privacy issues and questions about insurance. However, those already utilizing drones are more concerned with the quality and type of data they receive. PricewaterhouseCoopers, a multinational professional services network, did a study on commercial applications of drones in 2016. The report estimates that the market for drone-powered solutions in the agriculture industry is \$32.4 billion. With the growing interest to use drones for the imaging software options, the benefits have begun to outweigh the costs for many farmers.

Drones in use

The first stage of any agriculture cycle is to analyze the soil. Drones can produce a 3-D map for early soil analysis, which is useful in planning seed planting patterns. Once planted, drone-driven soil analysis provides data for irrigation, nitrogen-level management or other areas which may need improvements. Farmers just take the data card from the drone and hook it up to any computer.

The next step for an agriculture cycle is planting. Some companies use drones for the actual planting process, like BioCarbon Engineering. The company has taken ex-military drones and repurposed them for planting trees. The drone planting method has three stages: scanning the landscape, generating a 3-D map and shooting pods with seeds and plant nutrients into the soil. While using sowing machines is still the primary way to plant seeds, it comes with risks of working in difficult weather conditions and can be expensive.



Healthy fields

It is essential to keep an eye on crop health and catch early stages of fungal diseases or pest issues. The farmer's attention turns solely to keeping the crop healthy once it reaches later stages of the lifecycle; this requires constant field monitoring. This may also lead to the need to spray pesticides or herbicides, things that can be prevented with drone use.

“Many of the leading drones in the marketplace today offer automated flight, meaning the pilot simply identifies the boundary of the field and the craft will automatically create a flight plan,” Rosser said. “It can adjust the flight path if any other variables arise during the flight.”

Keeping an eye on things

The size of the field and the difficulty for proper crop monitoring present large obstacles in farming. The problem of monitoring large fields can be intensified by weather conditions, which can lead to increased risks and maintenance costs. Drones can play a big part in moving forward and eliminate some of the risks.

According to PricewaterHouse Coopers' website, the most advanced technology previously available for crop imaging was the use of satellites but there were limitations. Images had to be ordered in advance, could only be taken once a day and were imprecise. With drone technology, options for crop monitoring have increased and have become available at a lower cost.

Drones use distance-measuring equipment, which allows them to adjust altitude as the topography and geography vary. This enables the drones to spray the correct amount of liquid and keep an even coverage.

In addition, this allows for a reduction in both the amount of chemicals used in the process and the amount of pesticide runoff that penetrates groundwater. Experts say that aerial spraying can be done as much as five times faster than with traditional machinery.

A quick response is crucial to save an entire crop from dying. In addition, the faster response will allow a proper diagnosis and implementation of a remedy. This will support a plant in overcoming diseases and pests. The images will also help in the unfortunate event of crop failure, because the farmer will have a more precise documentation, providing a more efficient claim for insurance purposes.



Photo courtesy of Arable Media

A drone hovers above a field, taking photos.



Photo courtesy of FarmSolutions

Farmers can also use drones to know their crop yield. Hogue said he knows someone in California who already utilizes drones for this purpose.

“She is working with a company using augmented reality drones. They fly over an avocado field, for example, and that drone is specially designed to take photos and film, calculating how many avocados are on each tree and where they are located. They will know prior to harvest what they should expect in yield.”

The future of agriculture

It is presumed that if we continue looking into drone use in the field of agriculture, drones will eventually allow for a large transformation in data processing and meeting crop needs. In turn, this will allow for the higher yield of agriculture, hopefully meeting demands of consumers in the present and future.

According to Rosser, using drones to collect aerial data is on its way to becoming normal on both large- and small-scale farming operations.

“Aerial imagery provides savings in many aspects of farm management, including reducing labor costs, nutrient and chemical applications and even water applications,” Rosser said.

All of these changes add up, creating a dramatic impact on farming operations.

“There is some really interesting tech out there that allows us to do things we have never been able to do before,” Hogue said. “And what that allows us to do in the end goal here, is it will cost less money and be more efficient to grow these crops.”



Photo courtesy of Matthew Dittman

Hobby drone flyer, Kevin Kraffka, takes his drone for a flight over farmland.



Shelby Catron '14



Remembering Dr. Pfannstiel

Photo courtesy of Jenna Kujawski

Daniel Charles Pfannstiel, Ph.D., professor emeritus in the College of Agriculture and Life Sciences, passed away March 5, 2017. He served more than 40 years with the Texas A&M Agrilife Extension Service and served as director from 1976 to 1982.

Pfannstiel was born May 25, 1928, in Marion, Texas. He attended Texas A&M University and served as a member of the Ross Volunteers and the Corps of Cadets. After graduating from Texas A&M, he attended Michigan State University to obtain his master's degree and the University of Wisconsin for his Ph.D., where he was a visiting professor.

In his first position, Pfannstiel worked as an assistant county extension agent in Wharton, Texas, where he met his wife, Shirley Barron. He moved up through the ranks to eventually gain the title of director.

After stepping down from the extension service, he joined the Department of Agricultural Leadership, Education, and Communications at Texas A&M University as professor until 1991. Fellow colleague Gary Briers, Ph.D., worked alongside Pfannstiel, and developed a close professional relationship, as well as a personal one.

"He was an all-around good guy and good colleague, and so knowledgeable about extension," Briers said.

Pfannstiel and his wife traveled extensively: they visited all seven continents and more than 140 countries. He spoke German and Spanish fluently. Pfannstiel led many study-abroad trips to Germany. Briers accompanied Pfannstiel on a study abroad to Germany one summer, and said he saw Pfannstiel as a true citizen of the world.

"He loved international work, he loved international agriculture and he loved teaching people about that which he knew and that which he was excited about," Briers said.

In 2012, Pfannstiel sponsored the Department of ALEC first endowed chair. Briers said the ALEC department is not accustomed to receiving generous donations like Pfannstiel's \$1 million contribution, and the sponsorship was important for both the department and Pfannstiel.

Pfannstiel is survived by his two sons, David and Kerry, and his daughter, Diana. His endowed chair remains the only endowed professorship in the Department of ALEC. Pfannstiel's impact in the College of Agriculture and Life Sciences will endure through his charitable contribution, outstanding research and invaluable time spent with the department.

Failing Antibiotics



Antimicrobial Resistance is on the rise, and the USDA is taking steps to slow down its development, but is it enough? Could we soon be facing a post-antibiotic era?

A woman fought a high fever as she lay shivering on sweat-soaked sheets. The sounds of her weak, wet coughs filled the room. The doctors said she had tuberculosis, but the name meant nothing to her. She just knew no cure existed.

A little boy with dry, cracked lips asked again for a sip of water. A nurse placed a strong arm behind his back and slowly lifted him into a sitting position. She saw how the effects of dehydration caused by cholera took a heavy toll on the once vibrant child. He took a sip and she lowered him back down. She hoped he would be able to keep the water down this time. The nurse could do nothing else to help the child.

In the pre-antibiotic era, tuberculosis, cholera, syphilis and other bacterial infections ran rampant. Those infected faced death, and doctors could do little to help.

Then scientists discovered antimicrobial treatments, also known as antibiotics. Researchers and scientists developed vaccines and other modern medicines, and these illnesses became treatable and preventable. This prevented many deaths and mitigated human suffering.

However, some of these bacteria developed a resistance to modern medicines used to treat them, a phenomenon coined antimicrobial resistance. According to the World Health

Organization, antimicrobial resistance occurs when microorganisms stop antibiotics and other antimicrobials from working against them. Antimicrobial resistance renders treatments ineffective, so infections cannot heal, but they spread.

Untreatable bacterial illnesses are not commonplace in the U.S. today. For example, sick people can visit a doctor and receive antibiotics to cure their illnesses.

However, some of these drugs have been used incorrectly, or too much. Sometimes patients do not finish their antibiotics and give them to others. In some situations, doctors may incorrectly diagnose patients and treat them with antibiotics. Even when used correctly in proper situations, antibiotics do not kill all bacterial cells. In fact, sometimes these cells are treated, survive and develop a resistance to the medicine. They become stronger and more deadly.

According to the Centers for Disease Control and Prevention, at least 23,000 people in the U.S. die every year as a direct result of resistant bacteria.

Elizabeth Parker, CVM, works as the chief veterinarian at the Institute for Infectious Animal Diseases and is the subject matter expert related to livestock and animal health for Texas A&M University AgriLife Research. She said the bacteria are simply doing what they are supposed to do.

NATIONAL SUMMARY DATA

Estimated minimum number of illnesses and deaths caused by antibiotic resistance*:

At least  **2,049,442** illnesses,
 **23,000** deaths

**bacteria and fungus included in this report*

Estimated minimum number of illnesses and death due to *Clostridium difficile* (*C. difficile*), a unique bacterial infection that, although not significantly resistant to the drugs used to treat it, is directly related to antibiotic use and resistance:

At least  **250,000** illnesses,
 **14,000** deaths

WHERE DO INFECTIONS HAPPEN?

Antibiotic-resistant infections can happen anywhere. Data show that most happen in the general community; however, most deaths related to antibiotic resistance happen in healthcare settings, such as hospitals and nursing homes.

CS239559 Photo printed with permission from CDC



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

“The bacteria’s job is to modify and change, even when they are not in the presence of antimicrobials,” Parker said. “The mechanisms of how various bacteria develop resistance and how resistant genes are transferred are complex and scientists continue to study this challenging issue. We do know, however, that when an antimicrobial is used and does not kill all of the targeted bacteria, an increased opportunity for development of resistance is created.”

When antibiotics became less effective in the past, scientists and researchers developed new medications, but there has been a decrease in the amount and types of new antibiotics being produced in recent years. In fact, it has been 30 years since a class of antibiotics has been introduced.

Antibiotics have been used on animals to prevent and treat diseases and promote growth. In the past, people administered some of the same antibiotics

to humans and animals. According to a 1997 World Health Organization report, the resistant bacteria in animals can be passed to humans. Using the same antibiotics in both animals and humans can lead to increased development rates of antimicrobial resistance. Since then, many changes have been implemented in the food-producing animal industry.

To combat the increased rates of resistance, the Food and Drug Administration released two sets of guidelines for producers of animals for meat production. These guidelines made veterinarians and producers work closely together and responsibly in the administration of medicines.

This year, the FDA implemented the Veterinary Feed Directive, which stopped producers from purchasing medicated feed, with antimicrobials important to human health, over-the-counter. It permits the use of antibiotics in animals only when considered necessary for assuring the animal's health and when under the supervision or consultation of a veterinarian. This is part of a worldwide effort to combat antimicrobial resistance.

Even with new measures, the U.S. and the rest of the world may be facing a post-antibiotic era, which would lead to increased human suffering. According to Michael, Dominey-Howes and Labbate's article published in the National Center for Biotechnology Information, the world's current situation poses a threat to the health of humanity. They said this threat surpasses any previous infectious disease threat humans have faced.

These implications have research scientists and industry experts working diligently to develop new drugs and educate the public about the proper use of antibiotics. However, it cannot be left to scientists to solve this problem.

While the bottom line for working past this challenge is research, everyone can help in the prevention and mitigation of the development of antimicrobial resistance. Using antibacterial soaps and wipes in excess contribute to the development of resistance. Patients should pause before going to their physician and requesting antibiotics when doctors do not deem them necessary. Producers in the animal industry must work with their veterinarians when administering medicines.

Parker said everyone contributes to antimicrobial resistance and can either add to its development or help slow it.

"At the end of the day, no one wants resistant bacteria that we can prevent," Parker said. "It's not just the animal sector or the human sector. Everyone has a responsibility."

"At the end of the day, no one wants resistant bacteria that we can prevent," Parker said. "It's not just the animal sector or the human sector. Everyone has a responsibility."



Photo courtesy of Lauren Zajicek



Lauren Zajicek '18



AGGIES

FOR

Fresh

From communications to accounting and agricultural science, the fresh produce industry has many rewarding career opportunities for talented, confident and unique people like you. Connect with our team at aggiesforfresh.com or on social media — we'd love to talk!

Are you looking for a purposeful career?

Aggies for Fresh is a campaign created to recruit students from Texas A&M University to the industry that grows, ships, markets and sells fresh fruits and vegetables around the world on a daily basis. Industry champion Dan'l Mackey Almy '94 and her husband Andrew Almy '94 founded Aggies for Fresh in 2014 to inspire fellow Aggies to pursue a career in the fresh produce industry, and it's been growing ever since. "I believe Texas A&M has a wealth of premier talent that our industry needs to feed the world. We strive to position fresh produce at A&M as a purposeful and valuable career option," says Dan'l.

So, how are we helping you?

Aggies for Fresh is a huge supporter of student organizations in the College of Agriculture and Life Sciences like the Howdy Farm, COALS Council, AggiesMove and the Sigma Alpha sorority, and we're proud to sponsor graduate student research in fresh produce. This year, we also started an experiential scholarship program that brought six Aggie students to a fresh produce industry event, where they received hands-on experience and networked with industry leaders. Here's what they had to say about Aggies for Fresh:

Testimonials from your fellow students:

"Attending the Viva Fresh Expo and learning about the dynamic framework of the fresh produce industry was one of the most beneficial experiences of my undergraduate career. As a junior nutritional science major with aspirations of becoming a registered dietitian, this opportunity helped show me the vast amount of potential for future employment and need for collaboration with fresh produce professionals."

—Jackie Parker '16

"The Viva Fresh Expo is an experience I will never forget. The Viva Fresh Expo was a fabulous opportunity for students, like myself, who are graduating soon and have very little direction they want to take after college. Little direction in the sense of which industry they would like to fall into. I can say after learning more about the fresh produce industry, I am in love with it. I love that the work is different every day, there are passionate people striving to work towards the greater good and I love that this industry is making a difference in peoples' lives. I have a love for this industry and I hope to find myself working for it in the near future."

— Sarah Bockholt '16

"One of the remarkable people who have helped me make progress in reaching my professional goals is Dan'l Almy. I met Dan'l at a talk she gave at Texas A&M about the fresh produce industry. I was greatly impressed by her knowledge and enthusiasm. Thanks to her, I learned about the opportunity to attend the Viva Fresh Expo in San Antonio through Aggies for Fresh."

—Alonso Villaran '16

"Attending Viva Fresh was a fantastic opportunity and taught me so much about the fresh produce industry. Throughout the conference I saw the level of community that was represented. It doesn't take long to see that people working in fresh produce really love their work and are excited about it! This industry is full of supportive people working to make their communities happier and healthier."



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FRESH IN FALL

As the cold fronts roll in and the leaves begin to turn, most vegetation prepares for a barren winter — yet some seedlings flourish. Classic pumpkin spice lattes, apple cider candles and copious amounts of flannel symbolize fall, but this season has even more to offer in the garden.

According to the Fruits and Veggies More Matters website, 55 fruits and vegetables are considered in-season between September and November. Some of the most popular include acorn squash, Brussels sprouts, pumpkins and sweet potatoes. Although considered in-season, this produce needs proper care and attention to grow. In other words, the more knowledgeable the gardener, the more prosperous the harvest.

A successful garden consists of three categories: soil quality, nutrient management and water management. Each group is equally as important, and without one category the system will fail.

Head Field Manager of the Howdy Farm, Corey Wahl, explains how to attain a prosperous garden.

“The number one component of a successful fall garden is soil quality and health,” Wahl said. “Soil that contains too much sand will drain slowly and cause root rot problems, while soil that contains too little sand will drain quickly and leech nutrients.”

Adding organic matter to the soil mixture is a simple, yet effective, solution. This quick fix reinforces soil structure, balances the pH, feeds beneficial microbes and provides nutrients to the plants.

Nutrient management is the next important step to achieving a fruitful garden.

Plants need soil that contains the correct ratio of nitrogen, phosphorus and potassium. The soil will have a balanced pH from the previously added organic matter, making micronutrients available to the vegetation.

Proper water management serves as the final aspect to a healthy garden.

“Many gardeners tend to overwater their gardens,” Wahl said. “Giving your plants a deep watering every so often and then letting the soil dry down is better than giving the plants a little bit of water frequently.”

Heavily showering the garden will cause the roots to grow larger in their search for the deep water. A developed root system ensures the plant’s protection from disease and greater absorption of nutrients.

Gardening requires extensive planning and attention to detail. Fortunately, fall is the most prosperous time of year for gardening in Texas, whether the gardener is experienced or not. Unlike spring and summer, fall proves more consistent with moderate temperatures and fair weather conditions.

“Plants enjoy the warmth when they are putting on foliage, and they enjoy the cooler temperatures later in fall when they are fruiting or flowering,” Wahl said.

Fall gardening contrasts with other seasons by providing the opportunity to grow a wider range of produce as well.

For instance, warm season vegetables that last until the first freeze will overlap with cool season vegetables — this offers a greater variety of produce as winter approaches.

The most significant advantage of fall is how cool nighttime temperatures affect the taste of the crops.

Heat allows moisture to escape from the soil, which puts stress on the plant and thus diminishes the flavor of the produce. Cooler temperatures nurture the plant resulting in more sweeter and crispier vegetables.

Although fall is the ideal season to grow in Texas, threats to the garden still exist.

“The biggest challenge growing during this season is that the weeds and the insects are usually in full force after the summer heat dies down,” Wahl said.



Photo courtesy of Lauren Bluff



Armyworms and weeds can crowd the beds and destroy everything in their path. Luckily, with some outside help, these pesky intruders visit time can be cut in half. One of the easiest ways to remove unwanted garden guests is by using safe pesticides and herbicides.

Potential lack of rainfall presents another obstacle after an arid summer.

Soil needs moisture, but after months of sweltering, dry heat the ground can be left cracked and severely dehydrated. Without sufficient rainfall, it can be difficult to saturate the soil and, in return, leaves a dim prospect for healthy vegetation.

“Plants enjoy rainwater versus the city water, so they can struggle to establish into healthy plants without a few good spots of rain,” Wahl said.

Dry spells cause some gardeners to rely on the help of irrigation systems to keep the beds hydrated.

According to the Texas A&M AgriLife Extension website, sprinkler and drip irrigation are the most prevalent watering systems for gardening. Extension recommends using a combination of these two types of irrigation to grow the greatest yield of produce.

Gardeners looking to sustain a beautiful garden this fall have hope due to a variety of crops that flourish during this season. Additionally, fall gardening provides opportunities. Gardeners can regrow crops and learn from past harvests. Previous gardening seasons can be extended and produce greater yields.

The soil remains healthy and packed with nutrients for the following season’s crops. Vegetation thrives, and result in plentiful harvests. Fall gardening can be as rich and abundant as the iconic season itself.



Lauren Flint '17

Dr. Tammie Preston-Cunningham '98

Degree: Bachelor's degree in Poultry Science, Master's degree in Higher Education Administration, Doctorate in Agricultural Leadership, Education and Communications

Profession: Assistant Lecturer, Department of Agricultural Leadership, Education and Communications

What made you choose Texas A&M again and again?

When I looked at the area, poultry science was very new. I was the first African American female who graduated with that degree. They hadn't been here that long, the actual degree. And they're the best of the best. And the higher education program really spoke to me because that's what I was doing already with student affairs, I started the master's program when I was working in student affairs. It made sense. And when I got my Ph.D. I knew I wanted leadership, I didn't want just management. And it made sense to not go somewhere mediocre when I had the best right in my backyard.



Photo courtesy of Lauren Zajicek

How did Texas A&M help your success?

I started working for Texas A&M when I was 15. That's the reason I went into poultry science. I'm from College Station, but I didn't know anything about agriculture or anything like that. I did not even want to go to Texas A&M at first because nobody in my family had went. But I fell in love with the poultry science department. And when I fell in love with the poultry science department, I fell in love with Texas A&M. It has been impactful because of the amount of students and it has given me networking opportunities, but it has impacted me more because of the ability to have a family away from home and more of a purpose. I make a lot of decisions based on purpose and based on my ultimate purpose in life.

Do you have a favorite tradition at Texas A&M?

Silver Taps. Because it is a reminder that we're not by ourselves and what we do lasts even after our death. Hearing someone's name called helps you remember that you're not in it for just you.



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Hussey's Last Hurrah

Photo courtesy of Megan Haas

Texas A&M University keeps a sharp eye toward its future. In addition to the architectural and academic enhancements on this side of the train tracks, West Campus is about to undergo a few more changes. Mark A. Hussey is stepping down as the dean and vice chancellor of the College of Agriculture and Life Sciences, and the search is on for his replacement.

As the individual who holds an executive role in the country's largest agricultural and life sciences college of its kind, Hussey made the bold decision to step down after two full four-year terms to pursue his love for teaching.

"With the experiences I have had over the past few years, I would like to think that I have a little something to give back to the students," Hussey said.

Along with the dean and vice chancellor of the College of Engineering, and the dean of Medicine and vice chancellor for Health Services, Hussey is the university's other "super dean", a moniker for a dean who not only oversees his college but also multiple state agencies. That is why his title includes vice chancellor as well as dean.

Hussey not only oversees the 14 departments within the College of Agriculture and Life Sciences, but also the four state agencies. These agencies define the positive impact and outreach Texas A&M strives to achieve for its students, staff and community; they include Texas A&M Forest

Service, Veterinary Medical Diagnostic Laboratory, AgriLife Research and AgriLife Extension.

This seems like a daunting task to many, but these agencies have shown great success.

Hussey said he takes great pride in the growth in participation and leadership shown by the people in these agencies.

"There is no one that is even close to what we are doing," Hussey said.

Students and staff

Hussey has made significant improvements to the student and faculty experience on West Campus. He founded the college's five grand challenges: protecting our environment, enriching our youth, improving our health, growing our economy and feeding our world. These grand challenges build the foundation of the college's successes and ambitions.

The students thrive on the passion derived from the professors in this college. Students unmask new discoveries that make real changes in the outside world. Driven by devotion and creativity, their work becomes personal and meaningful with inspiration and innovative tactics. They graduate as experienced researchers, writers, scientists and leaders.

The hand-selected professors within the college make a huge impact on student's learning experience. The emphasis put into the selection process in building a strong team of professors has led to greater overall success for the students as a whole.

Although there have been many accomplishments and developments throughout his terms as dean, Hussey said that one of his personal favorites included the administrative team he put together here.

"There is no doubt that my administrative team is the best in the system," Hussey said. "Definitely the best on this campus, and they can do amazing things."

Another accomplishment Hussey says he is proud of is his implementation of the AgriLife Advanced Leadership Program, an 18-month long program that brings together faculty and scientists from the four agencies. He said the program focuses on the fundamentals of what it takes to be a good leader rather than emphasis on managing and training.

Leaving a legacy

Deans come and go from this beloved campus, and all leave an imprint. Through his creative vision and persistence, Hussey leaves behind the extensive development of "The Gardens." As more than vast amounts of sand, silt and clay that lie scattered across the backside of West Campus, "The Gardens" presents a multi-million, 40-acre plot for opportunity.



Hussey combined his passion for teaching and soil and crops sciences to create this large-scale project. It serves as an outdoor classroom for hands-on learning and research while incorporating the beauty and practices of Texas A&M's agricultural background and emphasis. While it currently stands in the early stages of development, this project aims to bring a huge addition to West Campus for its future students.

Hussey's dedication and devotion to this campus did not go unnoticed. His hard work landed him the position as interim president from January 14, 2014 to April 30, 2015. Consideration for the position in itself serves as a compliment to his accomplishments as an executive administrator. This spring he received the Administration Achievement Award from Association of Former Students Distinguished Achievement Awards for his hard work, skill, and leadership.

In his decision not to take on a third term as dean, he said one question keeps surfacing: "Why now?" "Although I am very proud of everything and have a lot of things that have happened, I think it is time for someone else," Hussey said. "If I haven't gotten my most important things accomplished in eight years, I'm probably not going to accomplish them in another eight."

With big shoes to fill, Texas A&M hopes to identify the new dean and vice chancellor by the end of this fall term.



Megan Haas '17



C.O.A.L.S.

C O U N C I L

Promoting communication

Encouraging personal development

Providing opportunities for social interaction

**“Unifying, serving and creating leadership in
the College of Agriculture and Life Sciences.”**



Photo provided by Stephanie Venn

Stephanie Venn '11

Degree: Bachelor's degree in Agricultural Leadership and Development

Profession: Former Inventory Control Specialist at Waste Control Specialist

Why did you choose agricultural leadership and development?

To be honest, I chose ALED because I was able to do an animal science emphasis, therefore utilizing my credits the most effectively. I learned about myself as a leader and how best to be part of a team. Many people are confused when I tell them what my major was, but I have been able to apply what I learned to my real world situations. I feel like, even though it may sound strange, it's one of the most useful degrees one can have. You're always going to interact with people, and I believe knowing what your strengths are, while being able to recognize strengths in others, is invaluable in the work place.

Why did Texas A&M as a whole help you be successful?

Texas A&M taught me everything. I was so young and naive when I started college. I never had to make hard decisions and most of my accomplishments in life had come fairly easy. Texas A&M taught me hard work, integrity, pride, family, toughness, failure, acceptance and how amazing it feels to accomplish something that at times you didn't think would ever happen. I overcame a lot of obstacles in my time there, and I'm so glad I stuck with it.

Do you have any tips for current/future students?

Soak it all in! The time you spend at Texas A&M will fly by. Breathe a little deeper on crisp autumn morning walks to class; take the time to notice the colors of the leaves and the beauty of older architecture on main campus. I had a music class on the 4th floor of the academic building and sometimes it would hit me how incredible it was that so many people had walked up the same cement stairs I was climbing that day.

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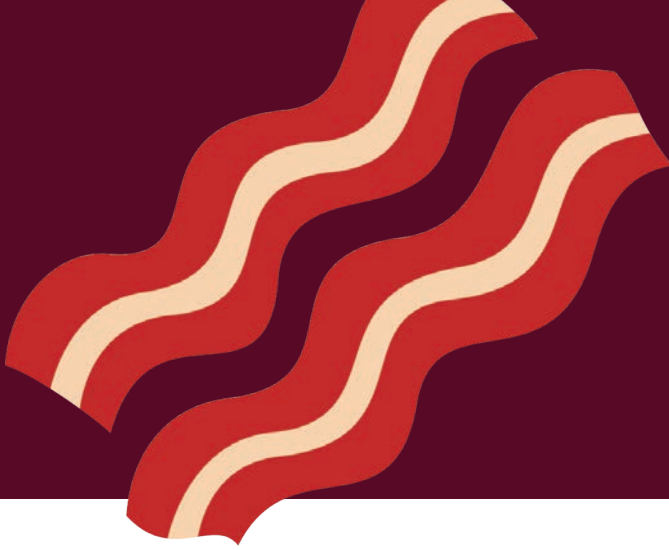
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APORKALYPSE

The absence of bacon would change the identity of many classic foods consumers love and enjoy.

Lettuce and tomato sandwich. Egg and cheese burrito. Is something missing from these popular foods?

The absence of bacon would change the identity of many classic foods consumers love and enjoy. The United States Department of Agriculture’s indication of low bacon reserves caused widespread panic for consumers, and the mass media fueled the fire by speculating the U.S. would run out of bacon.

“Low bacon reserves caused widespread panic for consumers.”

From this initial indication, the issue seemed worthy of mass news coverage and gained exposure from major news outlets. However, a closer look at the situation reveals a different aspect than originally assumed.

Pigging out

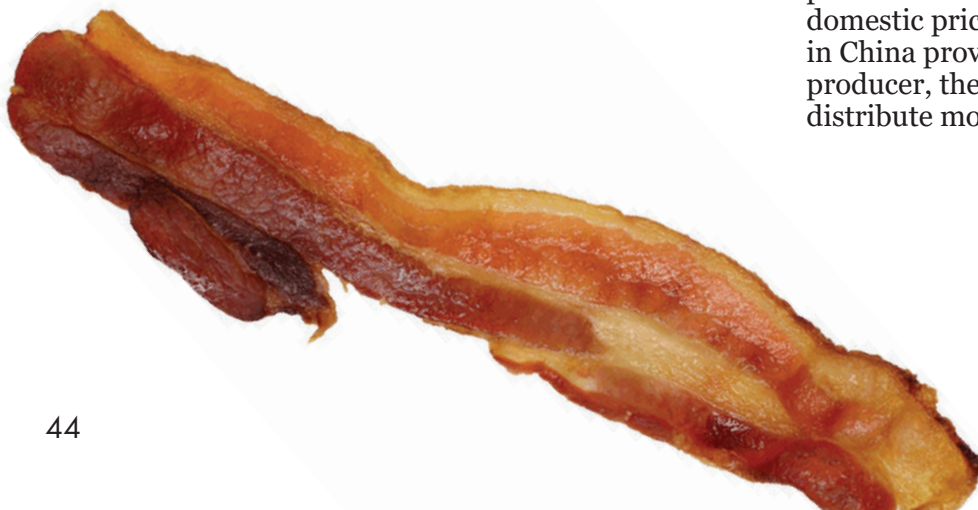
At the beginning of February 2017, the USDA released their annual food consumption report, which stated the national pork belly (bacon) reserves had dropped to 17.9 million pounds from 53 million pounds in the year prior. The coverage from the media created the “Aporkalypse” scare, which triggered a bacon-buying frenzy that spread across news feeds. This reaction gave the topic enough momentum to gain national exposure.

On the surface, seeing a significant drop in the United States Pork Belly Reserve indicated a serious issue for bacon lovers. The “Aporkalypse” gave the impression that the U.S. would run out of bacon. However, all market factors considered, the commodity supply was fairly balanced.

Pig spender

The media did not deem it important to mention the national pork belly reserve is just that: a reserve. The reserve merely exists to regulate the flow of bacon. While there may be a temporary shortage in the reserve, it is not because the U.S. is unable to meet demands.

According to the USDA’s annual report, exports of bacon increased substantially this year, to China in particular. Poor production practices drove their domestic prices up, so the price of imported bacon in China proved more affordable. As a leading pork producer, the U.S. benefits from the opportunity to distribute more to China.





Josh Amelunke works as a financial analyst for Traditions Wealth Advisors. Amelunke said a bacon shortage presented an easy topic for the mass media, but all the facts were not included.

“Supply isn’t down, only inventories,” Amelunke said. “Supply is increasing to keep up with the increased demand as a result of large draws from inventory. It’s easy to make a headline that says ‘U.S. pork inventories are at a 60-some-year low,’ without referencing the fact that pork producers can meet demand.”

“Supply is not down,
only inventories.”

However, the media’s coverage of the “Aporkalypse” had some positive effects on the pork industry. The media’s influence shifted the demand of bacon; more people bought bacon because they believed supplies were running out.

The increase in consumer’s spending on bacon caused the pork industry to maximize their market potential.

Looking at the pig picture

The trends reflected in various major stock exchanges and USDA reports reveal that Americans should not worry about the bacon supply.

According to the USDA’s market forecasts, the U.S. will retain its position as a major player in the international pork industry with expectations of an even higher domestic production.

Americans are among the most prominent bacon lovers, and production will continue to compensate for the demand.



Parker Brown '17



Jenna Garrett '17



Lauren Zajicek '17



THE LOST PINES AREN'T LOST



Photo courtesy of Briann Arndt

The crackling of bare pine trunks and boots crunching the dry earth floor echo throughout the lifeless forest. Exhausted firefighters trudge through blackened and smoking vegetation with defeat in their eyes. It was obvious they had just witnessed the most destructive wildfire in Texas history.

Spanning over 6,000 acres across the town of Bastrop, Texas, people will find what is called the Lost Pines Forest. Prior to September 2011, visitors would marvel at the lush greenery that grew along the scenic trails. Driving across the highway, passengers could see miles and miles of centuries-old loblolly pine trees.

According to the Texas Parks and Wildlife Department, scientists believe this strip of *Pinus taeda* may have been part of a much larger pine forest separated by glaciers long ago. The East Texas Piney Woods and the Lost Pines now have a large gap between them. Through adaptations, the pines were able to survive and grow in this region.

Today, only 100 acres of the Lost Pines are still living. On Labor Day of 2011, the heat of the summer sun brutally beamed down on Bastrop County. The area dried out, and the brittle, drought-stressed trees stood defenseless against Tropical Storm Lee's powerful winds. They fell into power lines, setting their branches ablaze. Soon, flames engulfed the park, seemingly leaving no tree unscathed.

The wrath of the wildfire continued for about two months. Crews relentlessly fought the monster that devoured this ecosystem in a short time. Formerly a gem to visitors, the Lost Pines now sat charred,

crisp and bare. According to the Texas Parks and Wildlife Department, the fire affected over 90 percent of Bastrop State Park, but never reached the area constituting Buescher State Park — the adjacent forest connected by a scenic park road. It devastatingly caused two deaths and destroyed 1,691 homes.

Four years later, déjà vu struck Bastrop residents as giant clouds of smoke filled the air on a warm October day. Named the "Hidden Pines Fire," the recovering Lost Pines fell victim to tragedy once again. According to the Texas A&M University Forest Service Law Enforcement Department, the fire was ignited by dry grass that accumulated around a piece of farming equipment. The flames took 4,323 acres and nine homes with them.

Volunteers regularly gather to restore the Lost Pines. TreeFolks' Bastrop County Community Reforestation Program provides reforestation services to those affected by the fires.

Through hard work and dedication, the organization has planted 2 million drought-tolerant loblolly pine trees in Bastrop so far.



Photo courtesy of Chase A. Fountain

Flames engulfed various areas of the park.



Closer to home, the Aggie Replant committee and hundreds of Texas A&M students united to become the first university to join the Lost Pines Forest Recovery Campaign. Following the fires, a 5-year plan was put in place in collaboration with the Texas Parks and Wildlife Department, the Arbor Day Foundation and Texas A&M Forest Service. They reached out to Texas A&M's student government for help in this effort, and Aggies jumped at the opportunity.

In February 2013, Aggie Replant planted over 9,000 pine saplings to the Lost Pines. Each year, Aggie Replant has significantly contributed to the restoration of the pine trees.

Central Texas Operations Department Head of Texas A&M Forest Service Jim Rooni provided logistical and financial support to Aggie Replant and the Texas Parks and Wildlife Department.

“Witnessing the community – hundreds and hundreds of people coming together and donating their time, effort and financial support – has been one of the most rewarding experiences of my professional career,” Rooni said.

According to Texas A&M Forest Service, as of February 2017, Aggie Replant has gathered nearly 2,000 volunteers and planted 45,000 trees across 108 acres of the park.

Anyone wanting to help can volunteer individually, in groups or as an organization.

“The most valuable donation an individual can make to the on-going efforts in Bastrop is their time,” Rooni said.



Photo courtesy of Earl Nottingham

Volunteers learn the proper method of planting seedling pines at Bastrop State Park.

The pines are gradually growing back. Random patches of green contrast with the dark scars on the tall pine trunks scattered through various areas of the forest. The forest depends on the weather patterns in the area. If Bastrop County experiences more drought stress through the years, the pines have little chance of significant growth. However, if rain persists, the pine seedlings that so many volunteers have worked hard to plant can establish their root systems and eventually grow into beautiful adult trees.

The story of the Lost Pines will live on in Texas history. Vibrant trees will reclaim their spots in the forest thanks to volunteers, including Aggies. Through community restoration efforts we find that, indeed, the Lost Pines are not lost.



Selena Arndt '17

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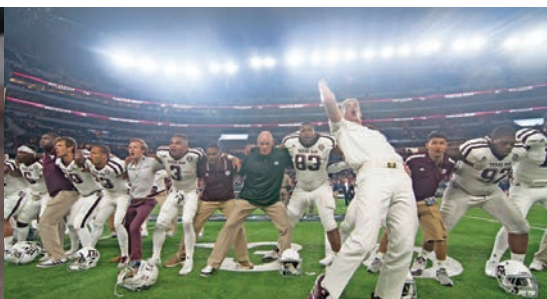
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