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A new year begins!
A new semester has begun and the campus is humming. It is fun to see the anticipation on the students’ faces. The department welcomed students back with donuts, coffee and orange juice and a semester’s worth of great classes, club activities, judging opportunities and work opportunities to prepare them for future careers. Thanks to the teaching office staff and faculty for making it all happen. (See pictures inside).

The Weed Science Team recently competed at the Southern Weed Science Society contest, and finished fourth out of 12 teams. Several members brought home individual awards as well. Congratulations to them on their successes. (See story page 8).

The Aggie Corn Maze is coming along and will be open weekends in October.

New semesters often mean changes in faculty and staff. In August we said good bye to Dr. Richard White after more than 28 years of service and Dr. Gary Peterson retired after 36 years (see stories). We look forward to the addition of Dr. Reagan Noland in San Angelo, and Dr. Murillo Maeda, who will replace Seth Byrd as the Extension Cotton Specialist in Amarillo. Both of those will officially begin working October 1. We will share more about them next month.

Harvests are underway, and variety data are being posted as quickly as possible on our crop websites, cotton.tamu.edu and varietytesting.tamu.edu. Producers are already thinking about varieties for next year and we know this data is often a part of their decision making process. You can read about Texas A&M AgriLife’s wheat picks for the High Plains on page 9.

Several faculty and staff members were recognized at the College of Agriculture and Life Sciences Dean’s Award Ceremony recently. Congratulations to Dr. Steve Hague, Dr. Cristine Morgan, Dr. Seth Murray and the drone team, and LeAnn Hague. It is nice to see their hard work recognized and rewarded.

Congratulations also to Dr. Muthu Bagavathiannan who recently was awarded one of 18 Specialty Crop Research Initiative (SCRI) grants from USDA National Institute of Food and Agriculture (NIFA) and to Dr. Haley Neely for her Conservation Innovation Grant.

We continue to explore many opportunities with corporate partnerships including recent discussions with Aspen Beverage and GeoJava; Scotts Miracle Gro, Bamert Seed and several other major seed companies.

We were saddened to lose one of our adjunct faculty. Dr. Arthur “Art” Onken passed away in August. Our thoughts and prayers are with his family.

We are looking forward to the Turfgrass Field Day in Dallas – the new facility may be ready in time for that event. We also are looking forward to the Genome Editing Conference in early October, upcoming rainwater harvesting trainings and other programs from our Extension water group. Our department’s Harvest Celebration is scheduled for October 26. We hope to see many of you there!

We expect cooler weather will be arriving soon, and we are ready for that too!

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More Information can be found at http://soilcrop.tamu.edu/giving/
Dr. Peyton Smith was soaring through the skies before she could drive, but it’s what is on the ground, or beneath the ground, that grabbed her fascination and led to her latest position with Texas A&M University Department of Soil and Crop Sciences.

“Now Smith, who’s been on the job a little more than a month, will be looking deep into Texas soils in her new position as an assistant professor of soil carbon dynamics in the Texas A&M soil and crop sciences department in College Station.

Her research in both above-ground and below-ground restoration and recovery responses has allowed her to travel all over the world, including research in north and south India, western Kenya, Puerto Rico, Costa Rica and throughout the U.S., including Alaska.

“So, while I may not be piloting myself around the world, I certainly have flown around the world to study forests and soils,” Smith said. “And now I’m eager to explore some of the issues that are pressing for Texas in the context of global change.”

She said she will concentrate on soil carbon preservation – namely, how climate change and extreme weather events such as drought and floods destabilize soil carbon.

“Soil organic carbon, organic matter, is one of the most essential components of the soil – it aids in soil structure and stability, water-holding capacity and nutrient availability – all things necessary to sustain microbial and plant life,” Smith said. “Soils are the largest terrestrial sink of carbon, but their potential to maintain stored carbon is being compromised by global change.

“Current research suggests soils may become a major source of carbon instead of a sink,” she said. “Soils have always been a significant source of greenhouse gases, but that is offset by their stabilization or sequestration capabilities. With changes in land use and climate, previously stored carbon may become available for microbial turnover, resulting in increased respiration and carbon dioxide production.”

Smith said she believes “soil science deserves to be recognized as an important platform,” and that’s why she chose to come to Texas A&M, which has one of the largest soil departments in the nation.

“Soil chemistry, physics and water dynamics are strengths of Texas A&M’s soil and crop science department, and their expertise will complement the interdisciplinary focus of my research, which has been identifying and characterizing soil chemical, biological and physical processes that control carbon and nutrient cycling.”

While much of her previous work had been in natural ecosystems or subsistence-based agriculture/forest systems, Smith said she looks forward to expanding her research to include important land uses in the state, such as different cropping systems and other agro-ecological ecosystems.

A native of Madison, Wisconsin, Smith earned her bachelor’s degree in forest ecology and natural resources management from the University of Washington-Seattle and master’s degree in environmental science from the School of Forestry and Environmental Studies at Yale University.

She earned her doctorate in soil science from the University of Wisconsin-Madison and came to Texas A&M after spending three and half years as a postdoctoral research associate at the Pacific Northwest National Laboratory in Richland, Washington.
Dr. Richard White intends to sit back and let the grass grow under his feet for a while, after spending 29 years helping develop turf for Texas’ sometimes unforgiving conditions.

Dr. White retired from his position as a professor in the Texas A&M University soil and crop sciences department and Texas A&M AgriLife Research turfgrass management scientist in College Station on Aug. 31.

He came to Texas A&M after working as an assistant professor at Rutgers University-Cook College in New Brunswick, New Jersey. He earned his bachelor’s and master’s degrees from Auburn University and his doctorate from Virginia Tech.

White started as an assistant research scientist in 1989 at Texas A&M AgriLife Research and Extension Center in Dallas and then moved to College Station in 1993 as an associate professor.

His teaching responsibilities included undergraduate courses and advising and directing graduate students.

“Dr. White was instrumental in developing the turfgrass science major for the department and has served as a leader in advanced teaching techniques and assessment,” said Dr. David Baltensperger, head of the Texas A&M soil and crop sciences department.

In his research program, he worked on cycling composted cattle manure through turfgrass sod as a water quality conservation tool and conducted extensive research work on many new dwarf Bermuda grass cultivars. He also spent considerable time improving water management to enhance the performance of creeping bent grass in the southern U.S., as well as on many other issues associated with water management and conservation.

“My research program also contributed to applied programs in irrigation water management and conservation and results in the refinement of management strategies that reduce cultural inputs required to maintain turfgrass areas,” White said.

White co-developed four zoysia grass, one bent grass, one perennial ryegrass and two annual ryegrass cultivars.

Some highlights of his career included:

- Being one of the first programs to conduct research on ultra-dwarf Bermuda grasses and directing a graduate student that discovered thermo-morphogenesis in dwarf Bermuda grasses.

- Working with several colleagues, the Texas Turfgrass Association and others to start the Texas Turfgrass Research, Education and Extension Endowment.

- Helping develop several turfgrass cultivars that are used extensively in the green industry such as Palisades zoysia grass.

- Working with colleagues and a corporate partner to design and construct one of the world’s largest automated runoff facilities for water quality research.

- Serving on the Faculty and Student Advisory Board for the Center for Teaching Excellence.

- Helping a team develop a patented system to reduce
landscape irrigation runoff.
- Providing assistance in the construction of Ellis Field, Olsen Field (now Olsen Field at Blue Bell Park), and more recently providing input on the Kyle Field redevelopment project.
- Receiving the Founders Award from the Turfgrass Producers of Texas in 2013.

White coordinated the design and development of the facility to provide the needed infrastructure and facilities for the turfgrass program. He had already developed and constructed a state-of-the-art surface water runoff facility at the same location in collaboration with other soil and crop sciences personnel and the Scotts Company.

He is a member of the Crop Science Society of America, Sports Turf Managers Association, Advisor to the Board – Texas Turfgrass Association.

“Dr. White has been a national leader for the turf industry, working across a broad range of industry, academic and agency partners to advance the role turfgrass can play in enhancing our environment,” Baltensperger said.

Maybe his most enduring legacy will be his shepherding of the ScottsMiracle-Gro Facility for Lawn and Garden Research, located at 3100 F&B Road in College Station, through its 15-year journey to reality.

He has been recognized with two Texas A&M University Vice-Chancellor’s Award in Excellence, College of Agriculture and Life Sciences, Research Team Awards; the Texas Environmental Excellence Award for the Rio Grande Basin Initiative in the Agriculture category; and the Texas A&M University Soil and Crop Sciences Department Award for Teaching.
Dr. Gary Peterson is retiring after 36 years at the Texas A&M AgriLife Research and Extension Center in Lubbock. (Texas A&M AgriLife photo)

Dr. Gary Peterson’s career with Texas A&M AgriLife Research has come full circle as he puts the wraps on 36 years in sorghum breeding.

After graduating on a Saturday night from Oklahoma State University in 1982, Peterson went to work the following Wednesday at the Texas A&M AgriLife Research and Extension Center in Lubbock, specializing in breeding hybrids resistant to insects.

“I took over Jerry Johnson’s work with greenbugs,” Peterson recalled. “It had been a problem for pretty much all sorghum hybrids. We released germplasm for resistance for all biotypes of greenbug. Then in the early ‘90s with a couple of changes in biotype, the greenbug wasn’t as big a problem.”

However, insect pests continued to be a problem internationally and Peterson’s work, including work on mitigating midge damage in sorghum, continued for several decades, during which time he helped train students and solve breeding problems globally.

His work was heightened when it came to the sugarcane aphid.

“Our first exposure to sugarcane aphid was about 34 years ago and there was a graduate student who came to Texas A&M from Botswana,” he said. “He wanted to do research for the country of Botswana, and we sent him 432 lines from the Sorghum Conversion program along with standard checks.

“Over the course of his doctoral program, he evaluated all of those lines. One of the lines, Tx2783 was a line developed by my predecessor, Jerry Johnson, for resistance to greenbug, but never developed or evaluated for sugarcane aphid resistance. Seems that Tx2783 was also resistant to sugarcane aphid.”

When sugarcane aphid began to be a problem in the U.S. and Texas in 2013, Peterson said they knew the Tx2783 line was resistant in Africa.

“Lo and behold, we found it to be resistant here. It is likely been used in industry directly as a hybrid parent and in breeding programs to produce other sugarcane aphid resistant lines,” he said. “That’s a benefit of international work directly to producers here. We released 19 lines resistant to sugarcane aphid this year. Fifteen of those lines derive from Tx2783.”

Longtime colleague, Dr. Calvin Trostle, Texas A&M AgriLife Extension agronomist at Lubbock, said it was comforting to have Peterson’s expertise during the introductory phase of battling sugarcane aphids in Texas.

“Gary was the person who best explained to me the nature of the insect as he had been dealing with it in Africa for 30 plus years,” Trostle said. “It is not a major concern in Africa and it was reassuring to know that the insect could be managed in time.”

Peterson fondly recalled first coming to the Lubbock Center and getting acquainted with Roy Quinby, who had retired about 1960 as director of the AgriLife Research Chillicothe Station. Quinby later worked in private industry and retired again.

“Quinby and U.S. Department of Agriculture geneticist Joe Stephens found a sterility system in sorghum,” he said. “Many research papers prior to the late 1950s would be authored by Quinby and Stevens. The sterility system developed by those two led to the first commercial-scale production of grain sorghum hybrids. When I started, Mr. Quinby was still around and working part time at the Halfway Experiment Station. He was one of the pioneers. There’s a historical marker commemorating hybrid sorghum there at Chillicothe.”

That exposure to those pioneers helped shape Peterson as a go-to scientist for other colleagues at the Lubbock center in tackling sorghum production challenges for Texas farmers.

“Gary was often my sounding board as well as a reasoned voice on grain sorghum,” Trostle said.

“Among colleagues, Gary was a partner in my thinking about grain sorghum and what can be done to improve its management and value to farmers.”

Peterson has been recognized for his international research work, receiving the Texas A&M University System Vice Chancellor’s Award in Excellence for international involvement in 2009. The award recognized his 27 years of sustained leadership in sorghum improvement and educating international students.

“Because of his efforts, many students have been educated in U.S. universities and have returned to Africa to contribute to solving food problems,” the award nomination stated.

Peterson said he has enjoyed his career and was glad to meet scientists like Quinby along the way.

“I got the golden opportunity to observe them and things they were able to do to make really valuable contributions to Texas agriculture,” he said.

Peterson said he is looking forward to improving his golf game, domestic travel with his wife and spending time with his grandchild. However, he said, the desire to make scientific contributions to agriculture still prevail.

“What I’ve told people is if there’s something that I can participate in, particularly as it relates to the sugarcane aphid, don’t hesitate to give me a call,” he said. “If I can make a contribution, I will certainly do it.”
Dr. Muthu Bagavathiannan is leading a national team of scientists that has been selected to receive a Specialty Crops Research Initiative (SCRI) Coordinated Agricultural Project (CAP) grant from the USDA National Institute of Food and Agriculture (NIFA).

The four-year $5.6 million grant will allow the team to conduct research on herbicide resistance in annual bluegrass, one of the most troublesome weeds in managed turf systems.

The overall goal of the project is to develop knowledge and tools to facilitate the development, dissemination and adoption of Best Management Practices for addressing herbicide resistance in annual bluegrass.

Dr. Bagavathiannan’s team includes Dr. Becky Grubbs (Extension Turf Specialist, AgriLife Extension) and 14 scientists from other states, including Drs. Jay McCurdy (Mississippi), Jim Brosnan (Tennessee), Scott McElroy (Alabama), Patrick McCullough (Auburn), Brian Unruh (Florida), Bert McCarty (South Carolina), Travis Gannon (North Carolina), Shawn Askew (Virginia), Aaron Patton (Indiana), John Kaminski (Pennsylvania), Matt Elmore (New Jersey), Alec Kowalewski (Oregon), David Erwin (Oregon), and George Frisvold (Arizona).

College of Agriculture and Life Sciences
Dean’s Outstanding Achievement Awards

Dr. Cristine Morgan received the Dean’s Outstanding Achievement Award for Faculty Mentoring from Dr. Patrick Stover.

Dr. Seth Murray (2nd from right) and Dr. Bill Rooney (pictured individually to the left) were part of the Unmanned Aerial Systems in Agriculture Team which won the Outstanding Achievement award for Interdisciplinary Research Team.

Dr. Endang Septiningsih was recognized for her promotion to Associate Professor.

Dr. Steve Hague was recognized for his promotion to full Professor.

Dr. Peyton Smith was recognized as new soil and crop sciences faculty.

Not Pictured: LeAnn Hague received the Dean’s Outstanding Achievement Award for Service. Dr. Katherine Carson was recognized as new soil and crop sciences faculty.
Members of the Texas A&M weeds judging team represented our university and department well at the 2018 Southern Weed Science Society contest in Memphis, Tennessee, last month.

The Aggie A-Team finished fourth out of 12 teams representing ten colleges and universities.

Prabhu Govindasamy, a Ph.D. candidate under Dr. Muthu Bagavathiannan, was the second high point individual in weed identification. In this portion of the contest, team members identify 50 weeds and/or weed seeds by both the common and scientific names.

Seth Abhugo, another Ph.D. student under Bagavathiannan, placed 11th out of the 51 graduate students who competed. He was closely followed by James Griffin, a Ph.D. student under Dr. Gaylon Morgan, who placed 12th.

"Participation in the weed judging provides our students with an excellent opportunity to learn applied aspects of weed management and to network with other weed science colleagues in the southern region," said Bagavathiannan, assistant professor in the Department of Soil and Crop Sciences at TAMU and the team’s head coach.

Two graduate teams and an undergraduate individual from TAMU competed at the contest. Aggie Team-A consisted of Abhugo, Govindasamy, Griffin and Samuelson. Team-B included Aniruddha Maity, a Ph.D. student under Bagavathiannan; Carson Wade, a Master’s student under Dr. Julie Howe; Blake Young and Cynthia Sias, both Master’s students under Bagavathiannan. The lone undergraduate was Austin Kelly, an ecosystem science major.

Assisting Bagavathiannan with the coaching this year were Vijay Singh, Spencer Samuelson, Seth Abhugo, and Prabhu Govindasamy.

The contest consists of four major events - weed identification, sprayer calibration (comprised of an individual written test and a team calibration event), crop/weed response to herbicides (symptomology), and crop/weed situation and recommendations (farmer problem) - plus a mystery event. In this year’s mystery event, the students were expected to find safety hazards caused by errors in the way a tractor and spray rig were loaded on a trailer.
Each year, experts with the Texas A&M AgriLife Extension Service and Texas A&M AgriLife Research jointly provide wheat producers across the High Plains their “Top Picks” list for varieties with the highest potential before planting time.

The summaries are derived from wheat variety trials coordinated by the Texas A&M AgriLife wheat breeding program in Amarillo, with funding provided by variety trial entry fees as well as the Texas Wheat Producers Board.

Picks are based on yield performance and consistency from over 30 multiyear, multisite irrigated and dryland trials harvested from 2015-2018. Test sites range from Lamesa to Perryton and west to Clovis, New Mexico.

In the High Plains, picks for full irrigation include TAM 113, TAM 114, TAM 304, Iba and Winterhawk. Top limited-irrigation picks are TAM 112, TAM 113, TAM 114, Iba, T158 and Winterhawk. Top dryland varieties are the TAM 112, TAM 113, TAM 114 and T158, along with the addition of two new ones this year, WB4721 and LCS Mint.

Dr. Calvin Trostle, AgriLife Extension agronomist in Lubbock, said WB Grainfield, Winterhawk and Iba were removed from the previous dryland list because their long-term performance has flattened out, while WB4721 and LCS Mint were added to the list.

“Pick” varieties with a minimum of three years in the Texas A&M AgriLife High Plains tests continue to yield 6-10 percent better as a group than all other varieties in both irrigated and dryland tests, according to the selection team.

Trostle said the experts also keep a two- and three-year “watch list” of varieties that might eventually make the Top Picks list. Denali, a Colorado line that was not entered in the 2017-2018 trials, was taken off the watch list this year and PlainsGold Avery and Long Branch were added for dryland production.

Dr. Jourdan Bell, AgriLife Extension agronomist in Amarillo, said Picks varieties are stable performers over several years, so producers are encouraged to consider them when purchasing new seed.

“Adding a Pick variety with a specific disease package or maturity that contrasts with your current variety would be a good complement to your overall program,” Bell said.

Across the Texas High Plains, much of the early wheat planted in September for dual-purpose production was drilled into good soil moisture resulting in good stands and good early forage production, she said. However, rain subsided in October, and much of the late wheat was dry sowed.

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The drought persisted across the Texas High Plains with the winter of 2017-2018 being one of the driest winters on record. Due to drought and lack of forage, producers pulled cattle off dryland earlier than anticipated.

Heavy fall forage production depleted soil water and deteriorated wheat conditions, especially on dryland acres, with many dryland fields not recovering, Bell said. With irrigation, many producers maintained forage and grain production. Some producers received localized rain in April and May that helped carry dryland wheat.

In several areas, dry-sowed winter wheat did not germinate until April, she said. Spring temperatures were above average, especially during pollination and early grain development. Yields of early planted ungrazed dryland wheat that established normally, if harvested, ranged from 10 to 20 bushels per acre.

“Amazingly, a few yields on dryland wheat topped 30 bushels per acre even though in-season rainfall was at best 2 inches,” Trostle said. “This is a testament to the value of deep soil moisture that carried the crop. Irrigated wheat ranged from 50 to 100 bushels per acre, depending on irrigation capacity.”

The AgriLife High Plains Wheat Picks over the years often only include one or two changes from previous years because multiyear data contributes to selection and wheat varieties tend to be available over many years, said Dr. Jackie Rudd, AgriLife Research wheat breeder in Amarillo.

“There can be good and bad years where a single variety might suffer or excel, but by taking the long-term look at them at multiple locations, we can better identify those that will have a more consistent performance,” Rudd said.

TAM 112 has had average performance most years and poor in 2017, but it was very good in 2018, he said. Due to greenbug tolerance and wheat curl mite/wheat streak mosaic virus tolerance, it continues to have an important role in High Plains wheat production.

Also, Rudd stressed this list is for grain production only. Although beardless TAM 204 is not on the picks list because of marginal bread-making quality, “it is an excellent choice for grazing.”

Wheat variety testing results for the High Plains are posted on http://amarillo.tamu.edu, http://lubbock.tamu.edu; and http://varietytesting.tamu.edu
A team of scientists from Texas A&M AgriLife and the University of Florida are working to increase and stabilize guar production in the U.S. by testing integration of guar into existing wheat production in the Southern Plains.

The team is funded for the next four years to conduct this work by the U.S. Department of Agriculture’s “Sustainable Agroecosystems: Functions, Processes and Management” grant program.

Guar produces a seed containing galactomannan gum, which is used in many food and industrial applications as a lubricant, binder, thickener and hardener, among other uses.

“Most people don’t know it, but guar affects our lives every day,” said Dr. Curtis Adams, Texas A&M AgriLife Research crop physiologist in Vernon. “Guar gum is in many of the foods we eat, it’s in products we use in our homes, it’s used to extract oil and gas from the ground.”

In recent years, Adams said, demand for guar gum has increased substantially, and the U.S. is the world’s largest consumer. In 2011, the U.S. Department of Agriculture reported the U.S. imported $1.1 billion in guar.

Guar is a legume, which means its roots can associate with Rhizobium bacteria in the soil to convert atmospheric nitrogen into fertilizer for the plant and soil, he said. It’s adapted to the semi-arid conditions of Texas and is among the most drought-tolerant crop plants, with relatively low water use.

“Introducing legumes, especially well-adapted legumes like guar, into our cropping systems provides a potential opportunity to improve soil nitrogen fertility and reduce input costs,” said Dr. Calvin Trostle, Texas A&M AgriLife Extension Service agronomist in Lubbock.

“Despite high guar consumption and benefits the plant can provide in cropping systems, U.S. guar production is unstable and only amounts to a small fraction of the world’s guar supply,” Adams said. “We believe this represents missed economic and environmental opportunities.”

U.S. guar production is centered in the Southern Great Plains region of Texas, though acreage has remained low relative to major crops in the region due to a variety of factors.

“One reason U.S. guar production is low is that guar has typically not had the income potential of cotton, the dominant summer crop in this area,” Adams said. “A lack of crop insurance for guar is another reason, which may be attributed to the lack of development in the industry.”

When guar is grown here, it is usually in cotton systems, and then only when cotton prices are particularly low or as an emergency crop following failed cotton, he said.

“We expect competition with cotton to be an ongoing barrier to guar production for producers,” Adams said. “But, wheat cropping systems, which are left fallow in the summer, may provide another venue for guar.

“Integration of guar into wheat cropping systems has not been rigorously tested. But data gathered by our team showed that wheat planted immediately following guar had far higher productivity than wheat following three other summer crops, including cotton, sesame and sorghum.”

Trostle said the results of published studies on guar and wheat planting dates, water use and other relevant factors also suggest that the crops would complement each other in a combined cropping system.

“We hope this new USDA project will provide useful information on how and why guar should be integrated into wheat cropping systems, helping to boost and stabilize U.S. production of the crop,” Adams said.

Joining Adams and Trostle on the research team are Dr. Srini Ale, geospatial hydrologist, Dr. Seong Park, economist, and Dr. Paul DeLaune, environmental soil scientist, all with AgriLife Research in Vernon, as well as Drs. Gerrit Hoogenboom and Ken Boote, plant modelers from the University of Florida.

In the new project they will test various system management scenarios for integration of guar into wheat systems in Vernon and Lubbock, measuring and simulating impacts of the integration on crop, soil, water and economic factors.

The researchers will identify optimal cropping intensities to enhance productivity and soil nitrogen fertility. In doing so, they said they expect soil organic carbon and rates of microbial activity will increase in wheat-guar systems, an indication of potential improvements in soil health. DeLaune will work on this aspect of the project.

Another core aspect of the project is development of an original Decision Support System for Agrotechnology Transfer, or DSSAT, model for guar to aid in data extrapolation and decision support. Hoogenboom and Boote will be working on development of the DSSAT model, while Ale will be making simulations with the new model.

“Our model will be the first of its kind for guar and will help improve our understanding of guar and how best to utilize the crop,” Ale said.

“Ultimately, we want to make producers aware of potential benefits and challenges associated with integrating guar into wheat production systems, benefitting producers and increasing domestic guar production,” Adams said.
Texas A&M turfgrass, landscape field day set Oct. 10 in Dallas

By: Gabe Saldana

An Oct. 10 turfgrass and landscape field day for professionals and enthusiasts will offer industry networking opportunities, research facility tours and technical discussions by Texas A&M AgriLife researchers and specialists.

The event will be from 7 a.m.-2 p.m at the Texas A&M AgriLife Research and Extension Center at Dallas, 17360 Coit Road.

Sixteen expert-led sessions will include topics like herbicide selection for weed management; breeding improved warm-season turfgrass cultivars; controlling insect pests; and methods for proper disease diagnosis.

A full agenda and registration are available at https://tinyurl.com/aggieturfday2018.

Sponsorship opportunities are available at: https://dallas.tamu.edu/media/1613/2018-turfgrass-field-day-sponsorship-info.pdf

“Guests will have time to attend as many as eight of the 20-minute discussions,” said Dr. Lindsey Hoffman, Texas A&M AgriLife Extension Service turfgrass specialist in Dallas. “There will be plenty of time for visitors to meet industry and academic experts throughout the event.”

Speakers include Texas A&M faculty and staff from College Station and Dallas who work to address green-industry challenges with cutting-edge science, Hoffman said. Meanwhile, turfgrass and green industry representatives, including chemical and equipment companies, will be on hand for technical information and networking opportunities.

“It’s a chance for science and industry to converge in supporting the next advancements in our field,” Hoffman said.

A $55 registration fee, through Oct. 5, includes coffee, a light breakfast and a barbecue lunch in the Dallas center’s new Water Education Building. Registration after Oct. 5 and at the door is $75. Sponsorship information is available at the registration website.

The field day event offers continuing education units from the Texas Department of Agriculture and the Texas Nursery and Landscape Association. Visit the registration site for CEU information and any scheduling updates.

Reagan Hejl speaks to participants at the 2017 turfgrass field day in College Station. The turfgrass field day rotates between the Dallas Center and College Station each year.

The Aggie Corn Maze is just around the corner!

The 2018 Aggie Corn Maze will be open each weekend in October with activities and fun for the whole family!

With the exception of October 13 and October 27 (home football games) the maze will be open Friday - Sunday at its location on F and B Road just southwest of the TAMU Soil, Water and Forage Testing Laboratory 2610 F and B Road.

This will be the fourth year soil and crop sciences students have put on the maze and it keeps getting bigger and better!

In addition to the maze, there will be a pumpkin patch, photo areas, a cotton field, games for the kids and more!

We hope to see you in October for an aMAZing time!
Texas wheat producers may increase planted acres slightly as the forecast for moisture through winter and market trends improve outlook, according to Texas A&M AgriLife Extension Service experts.

Dr. Clark Neely, AgriLife Extension small grains and oilseed specialist, College Station, said he anticipates a “bump” in statewide wheat acres this season. Texas wheat acres have been exceptionally low, around 4.5 million acres, he said. But they could settle between 4.7 million to 5 million acres based on recent price trends.

"Prices crept up in June and August," Neely said. "They’ve fallen since, but prices are higher than they were last year, and the rally may be enough to entice growers, especially on acres that haven’t had wheat in their rotation in a while."

Neely said dryland acres will be subject to Mother Nature because subsoil levels in predominant wheat growing regions – High Plains and Rolling Plains – are not at levels that would sustain dryland wheat fields. Dryland wheat makes up a large percentage of the acres in the Panhandle and South High Plains.

He is cautiously optimistic about rain because trends indicate an El Nino weather pattern this winter, which typically means more moisture.

“There’s a fairly strong trend that we’ll have more moisture this winter,” he said. “If we don’t, there’s not much moisture in reserve for wheat.”

Dr. Jourdan Bell, Agrilife Extension agronomist, Amarillo, said producers in the High Plains are beginning to plant winter wheat pastures for grazing and that wheat plantings should begin in earnest soon although many producers are still waiting on moisture.

Bell said scattered rains delivered around 1 inch of moisture and created good planting conditions for some wheat producers. Forecasts were calling for chances of rain and temperatures in the 80s, which will minimize rapid drying of soil and create ideal conditions for wheat drilling.

However, in some areas there is not any subsoil moisture, which is a concern because there may be sufficient soil moisture to germinate wheat, but without continued precipitation it may run out of moisture and die, she said.

“Many irrigated producers who planned to have wheat pastures ready for grazing by early fall have already planted,” she said. “There are also producers who plant wheat as late as December, after corn and cotton harvest, but the bulk of planting is in September and October. Producers are still watching the weather and markets, so we don’t know just yet what producers are considering with their acres.”

Bell said planted wheat acreage in the region would likely be steady following reductions in recent years. She doesn’t expect a significant decrease in acres planted, especially for grazing.

“Winter wheat is very important for the cattle industry in this region,” she said. “Producers may graze their fields and watch the market before deciding they want to take it to grain.

“It appears that wheat planting is slower than in previous years due to the persistent drought across much of the region,” she said. “However, wheat pasture is in high demand for stocker cattle, and I anticipate seeing wheat planting get busy in the next few weeks if the forecast holds for timely precipitation.”
Producers, homeowners battling armyworms

Hay and forage producers and homeowners around the state are battling armyworms following rains and cooler weather, according to Texas A&M AgriLife Extension Service experts.

The fall armyworm is a common pest of Bermuda grass and many other crops in Texas, Dr. Vanessa Corriher-Olson, AgriLife Extension forage specialist, Overton, said. Given their appetite, numbers and ability to move, fall armyworms can consume entire fields or pastures in a few days.

“I highly, highly recommend producers scout their pastures,” she said. “We’ve been dry and recently received rain, and that combination is a sign that armyworms will follow. Nine out of 10 calls I’ve received in the last several days were regarding armyworms, so producers need to be diligent and protect their pastures.”

Corriher-Olson said limited forage and hay production this summer makes protecting hay fields and winter pasture seedlings critical.

Armyworm caterpillars are picky eaters that prefer high-quality, fertilized forage typically found on fields maintained for hay production or pasture, she said. They are a common pest of Bermuda grass, sorghum, corn, wheat, rye grass and many other crops in north and central Texas.

Producers should scout each morning for armyworms, she said. Armyworms are night feeders that try to avoid daytime temperatures.

Armyworms are green, brown or black in color and can be identified by the white inverted Y on their head. They can grow up to 1 inch in length when mature. The pest got its name because they appear to march across hay fields, consuming the grass in their path.

Improved hay pastures with dense canopies and vigorous growth are often more susceptible to armyworm infestations than less fertilized fields, Corriher-Olson said. Irrigated fields are also susceptible to infestations, especially during drought conditions.

“Look for fall armyworms feeding in the crop canopy during the late evening and early morning and during cool, cloudy weather,” she said. “When fields are wet with dew, armyworms can stick on rubber boots while walking through the field.”

The key to managing fall armyworms is frequent inspection of fields to detect infestations, she said. Armyworm moths can lay up to 2,000 eggs that hatch in two to three days, according to a 2018 report by AgriLife Extension entomologist Dr. Allen Knutson, based in Dallas. There are four to five generations per year.

The threshold for insecticide spray treating a pasture is three or more armyworms per square foot, Corriher-Olson said. Armyworms in those numbers should be treated immediately because armyworm caterpillars consume 85 percent of their diet in the last two to three days of their larval stage.

Corriher-Olson recommends insecticides labeled for armyworm control in pastures and hayfields. She said applicators should always follow all label instructions on pesticide use and restrictions.

For more information about armyworms, go to https://bit.ly/2xlWpDP.

“Armyworms have been a problem and will continue to be a problem,” she said. “Producers just need to make scouting, especially following any rain event, part of their routine. The key is to be ready to treat for armyworms as soon as they are present because they can cause serious damage in a short amount of time.”
Sympathy

The family of Dr. Arthur (Art) Onken who passed away August 16. Art was a soil chemist and a Professor Emeritus for the Department of Soil and Crop Sciences.

Al and Joyce Nelson and their family as they mourn the loss of Joyce’s mother, Mrs. Frances Bockhorn. Al is the manager of the farm in the Brazos Bottom.

Concerns

Olivia Carson, the 15-year-old daughter of Kathy and Chris Carson, has had surgery to remove the cancerous bone and tumor in her arm. She will begin her second round of chemotherapy at the end of the month. (Dr. Kathy Carson is an assistant professor in weeds science in College Station.)

Donations are being accepted for Olivia at the Brazos Valley Church of Christ, 625 Graham Road, College Station, TX 77845.

Welcome Back Students!

The department welcomed students back to school with 18 dozen donuts, 5 gallons of juice and 5 liters of coffee.

Some students grabbed a donut and went on to class. Others, who just finished class, took a little time to visit with other students, faculty and staff.

Please keep these members of our Soil and Crop Sciences family in your thoughts and prayers.
Genome Editing Symposium

October 4-5, graduate students in the Department of Soil and Crop Sciences and other departments will be hosting the first Genome Editing Symposium.

Day one of the event will be a full-day research symposium and student research poster competition. Keynote speakers will be Bing Yang, University of Missouri; Dan Voytas, University of Minnesota; Edward Cargill, Bayer Crop Science; and Joyce Van Eck, Boyce Thomson Institute, and others.

Day two will include a half-day workshop on tools needed to perform a genome editing experiment and a panel discussion on the future of genome editing.

“We are really excited about this event, and have already exceeded our expectations for registrations,” said Karina Morales, one of the event coordinators.

The symposium is free, but registration is required. A webinar will be provided for those who cannot attend in person. That link will be provided to all registered attendees.

Registration is open until Sept. 21 - you may register at: https://genome-editing-symposium-tamu.com/registration/

Registration for the student poster competition also closes September 21.

More information may be found on the event website: https://genome-editing/symposium-tamu.com/ or the facebook page https://www.facebook.com/GESymposium

Notes from our readers

We love hearing from our readers! It is great to hear that you enjoy the newsletter and to learn a little about what is going on in your lives.

Bob Harris, Grain Berry Mills Division, wrote:

Thank you for your exciting newsletter. It was fun to read David Baltensperger’s piece and see his photo. Lovely man! I met him with Lloyd Rooney years ago. And, of course, Bill Rooney is like a member of my family. He’s the greatest!

Charles Johnson wrote:

I received your newsletter and thought I would connect with you. My wife and I are serving with Presbyterian World Mission in Zambia. I graduated from A&M in 1978 with a B.S. in Agronomy and in 1980 with an MBA. Prior to coming to Zambia in 2016 I owned Patty’s Herbs, Inc. which supplies fresh herbs to HEB (I sold the company prior to beginning mission service.)

In Zambia we partner with the Church of central Africa Presbyterian Synod of Zambia to help expand its holistic ministry of community development, food security and improved health. I serve as a development specialist here - my primary duties include teaching courses in sustainable agriculture at Chasfu Theological College. I help coordinate the development of Chasfu Model Farm, which will one day become a training center for smallholders in this region. I also coordinate a commercial farming activity which we hope will generate revenue to provide support to the seminary.
September
04 - P&T Committee meeting
13 - Bushland Forage Sorghum Field Day
13 - TAMU Dean’s Outstanding Achievement Awards - AgriLife Center

October
1-2 - Bennett Women’s Conference - Fredericksburg
4-5 - Gene Editing Symposium - MSC Gates Ballroom, College Station
9 - Faculty Meeting 2:00 p.m.
10 - Turfgrass Field Day - Dallas
15-19 - Fall Ranch Management University
17-18 - Borlaug Dialog International Symposium
19 - 3rd Annual Chili Cook-off Fundraiser to benefit the Brazos Valley Food Bank
23-25 - CAST annual meeting, Sacramento, CA
26 - Fall Harvest Bash - 6:00 p.m., Scotts Facility, College Station

November
4-8 - ASA and CSSA meetings - Baltimore, MD
13 - Faculty Meeting 2:00 p.m.
22-23 - Thanksgiving Holidays
27-29 - Amarillo Farm and Ranch Show

Save the Date
December 1-4 - CSSP meeting - Washington D.C.
December 4-5 - Texas Plant Protection Assn. Meeting - Bryan, TX
December 15 - 3 to 6 p.m. Baltensperger Christmas Open House
January 7-9 - 2019 AgriLife Conference, College Station
February 25 - March 1, 2019 - Turfgrass Ecology & Mgmt Short Course - College Station
April 11, 2019 - Department of Soil and Crop Sciences Awards Banquet - Hildebrand Equine Facility