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Dear ATCOFA alumni and friends,

As the fall 2018 semester draws to a close and the holidays approach, it is appropriate to reflect on the opportunities and recent achievements of the ATCOFA faculty, staff and students. Dr. Craig Morton, professor of agriculture, and Dr. Kenneth Farrish, Arnold Distinguished Professor of forest soils, were honored for their sustained innovation in teaching. Research conducted by Dr. Chris Schalk, assistant professor of forest wildlife management, was featured in a recent issue of Texas Parks and Wildlife magazine. Our students continue to represent the college well on the regional and national stage. This past October in Portland, Oregon, forestry students representing the SFA student chapter of the Society of American Foresters won the highly-competitive national quiz bowl. Many more achievements and recognitions are highlighted in this newsletter.

This past summer, we received permission from university administration to submit a tuition revenue bond request to the Texas Legislature for a new natural resources science and innovations laboratory. The proposed building would serve all college programs and military science. In order to ensure that our graduates receive the best preparation possible towards successful careers, we have critical needs for modern laboratory facilities, especially for agriculture engineering technology and geospatial science.

The college awarded a record amount of scholarships for the 2018-19 academic year. We are grateful for the ATCOFA alumni and friends that provide this generous support. I especially want to recognize Resource Management Services for selecting us for a $10,000-per-year scholarship that will go to an undergraduate forestry student with a study concentration in forest management. We will continue to work with our alumni and stakeholders to increase student financial support.

College enrollment has increased by about four percent at the start of this academic year, with the forestry program experiencing approximately an 18-percent increase. Efforts in recruiting and retention will continue to be a focus in order to meet the increasing demand for well-trained professionals.

The feature of this newsletter is the outstanding study abroad experience in Haiti for our students led by Dr. Shelby Laird, assistant professor of natural resource communications. There is no better example of experience-based learning combined with giving back to the local community.

Thank you for taking the time to learn about the accomplishments of our alumni, faculty, staff and students. The ATCOFA family wishes you all the best for the new year.

-Hans Williams
ATCOFA enters partnership with China’s Jilin Provincial Academy of Forestry Sciences

Stephen F. Austin State University’s Arthur Temple College of Forestry and Agriculture has entered into a cooperative relationship with the Jilin Provincial Academy of Forestry Sciences, located in China’s Jilin Province, securing opportunities for international research collaboration as well as advancements in forest health and sustainability.

Dr. Zhang Jianqiu, president of the Jilin Provincial Academy of Forestry Sciences, said his primary goal is to complete collaborative research that focuses on tree improvement, tree physiology, biotechnology and wildlife management.

Much of this research will be accomplished through student and professor exchanges between the two institutions.

“The agricultural and forest resources issues facing Jilin Province are very similar to our own,” said Dr. Hans Williams, dean of SFA’s Arthur Temple College of Forestry and Agriculture. “Through collaboration with colleagues at the Jilin Provincial Academy of Forestry Sciences, we can discover mutually beneficial solutions to these challenges, as well as learn from each other through cultural exchange.”

Dr. Yuhui Weng, assistant professor of forest biometrics at SFA, facilitated the partnership.

The Jilin Provincial Academy of Forestry Sciences was established in 1956 as the province’s only multidisciplinary forest research institute. It maintains four research institutes that focus on forestry, timber, natural resources and protection, forest biotechnology, and remote-sensing applications.
National Center for Pharmaceutical Crops receives U.S. patent for cancer-fighting compound

A plant many consider destructive may have just redeemed itself by offering promise in fighting cancer.

A team of researchers at Stephen F. Austin State University’s National Center for Pharmaceutical Crops, located within the Arthur Temple College of Forestry and Agricultural, has spent years researching giant salvinia, a noxious plant species known to overtake waterways and kill aquatic life.

The researchers’ work has recently led to a U.S. patent for an anti-cancer compound, Salviniol. Lab trials conducted at the NCPC verify Salviniol can slow and, in some cases, completely inhibit the growth of a wide range of cancer cells, including pancreatic and lung cancer cells.

“People often turn to tropical locations to search for medicinal compounds, but that requires a lot of money and resources,” said Dr. Shiyou Li, research professor and director of the NCPC. “Instead, we turned to a native and invasive species in our own backyard.”

During the past two decades, Li and SFA research scientists Guangrui Deng, Zushang Su, Ping Wang and Wei Yuan have isolated more than 2,000 chemical compounds from roughly 1,300 species. Many of these compounds are currently undergoing rigorous lab trials to verify their pharmacological potential.

In the quest to isolate potential anti-cancer compounds, Li and his team also made a revolutionary breakthrough in the control of invasive species. Endogenous biocide, or endocide, is a concept developed by Li that refers to the chemical compounds within a species that, when exposed, have biocidal effects on that species. Moreover, these biocidal effects are species specific, meaning surrounding unrelated species are not negatively affected.

While this concept initially focused on giant salvinia, research has shown that the endocide concept can be used to control numerous other plant and animal species, including fire ants.

“This is the most amazing thing I have seen in my career,” said Dr. Steve Bullard, SFA provost and vice president for academic affairs. “The science community is not fully aware of Dr. Li’s work yet, and that is why it is so important to protect this intellectual property through patents.”

The NCPC also is collaborating with the MD Anderson Cancer Center in Houston to investigate how anti-inflammatory compounds in turmeric, an herbaceous perennial plant, can be used in cancer treatment.

The NCPC, formerly known as the Center for Medicinal Plant Research, was established in 2004 through U.S. congressional appropriations and has received support from former U.S. Sen. Kay Bailey Hutchison and U.S. Congressman Louie Gohmert. Its primary mission is improving human health through the discovery of novel anti-tumor and anti-viral agents from native and invasive species.

Li said that both the offices of Hutchison and Gohmert provided invaluable support during the past 20 years, and as his research moves forward, he hopes to develop new partnerships and investors to further the center’s mission.

To learn more about the NCPC, visit forestry.sfasu.edu/ncpc.
Dr. Craig Morton named Agriculture Educator of the Year

By David Alders, SFA Board of Regents member

When it comes to modern agricultural mechanics, Dr. Craig H. Morton, professor of agriculture at Stephen F. Austin State University, either wrote the book or contributed heavily to its content and development. The 2018 Nacogdoches County Agriculture Educator of the Year authored “Welding for Modern Agriculture,” the definitive text on that subject, and contributed numerous chapters to “Agricultural Technical Systems and Mechanics,” the primary text for high school agricultural mechanics programs nationwide, among many others.

Morton’s curriculum vitae is filled with dozens of examples of commitment and service to his students in SFA’s agricultural engineering technology program and to FFA members across the state and nation who compete in career development contests. Morton also served his country for three decades as an officer in the United States Army and the National Guard and Reserve. During his deployments in the Army Reserve, he served the people of Afghanistan through consulting projects aimed at developing the nation’s agricultural economy.

Morton grew up in Nacogdoches and came by his lifelong love of agricultural engineering honestly. As an agriculture student at Nacogdoches High School in the late 1960s, Morton raised Yorkshire hogs, laying hens, cattle and hay on his family’s farm in Melrose. He credits his high school agriculture instructors, Nolan Alders and Clois Walker, for helping make the NHS agriculture department one of the nation’s top-tier vocational agriculture programs and for inspiring him to embark on a career in agricultural education.

After graduating from NHS in 1969, he enrolled at SFA and earned a degree in agricultural education. As an undergraduate, Morton was a member of the ROTC and worked as a projector operator at the SFA and Main theatres. Morton then earned a master’s degree in agriculture education from Texas A&M University.

Commissioned as a second lieutenant upon his graduation from SFA, Morton joined the United States Army Infantry after earning his master’s degree and was deployed to Germany twice during the next three years.

After leaving active duty in the Army, Morton worked as a county extension agent in Houston County until 1980, when he decided to pursue a doctoral degree in agricultural education with an emphasis in agriculture engineering at the University of Missouri. From 1982 to 1988, Morton held the post of assistant professor in the agriculture department at Southwest Missouri State University in Springfield.

In 1988, Morton returned to Nacogdoches to serve as assistant professor in SFA’s Department of Military Science and the ROTC, a position he held through 1991. During that year, he declined an opportunity to move to Washington for a job in the Pentagon and instead accepted a position as visiting assistant professor of agriculture mechanics at Southwest Texas State University in San Marcos. A year later, he returned to the piney woods of East Texas where he taught geography and physical science at Diboll High School. In 1993, he accepted an offer to teach science and physical education at the Nacogdoches Boys Ranch, part of Woden ISD. From 1997 through 1998, he was deployed to Bosnia and served as liaison officer for all Army Reserve troops in that theater of operations. Upon returning to the United States in 1998, he applied for teaching positions at Tarleton State University and at SFA and was offered positions at both. He accepted the position at SFA and has directed the agricultural engineering technology program for the past two decades.

The Agriculture Educator of the Year award is sponsored by Citizens 1st Bank.
Resource Management Service offers new scholarship

Resource Management Service LLC, one of the world’s leading managers of forest investments for institutional investors, announced that it will fund a new scholarship program to benefit students pursuing undergraduate degrees in forestry land-grant universities in the U.S. South, including Stephen F. Austin State University.

The RMS Forestry Scholarship was conceived as a way to promote forestry as a career path and is targeted at students from populations that historically have been under-represented in the profession or who would benefit from receiving significant financial support in their efforts to complete their forestry degrees.

“Forestry is an important profession — one that can have a very positive impact on the world,” said Craig Blair, president and CEO of RMS. “Foresters help society meet its needs through the sustainable management of one of our most important renewable resources — our forests. This scholarship program is an effort to promote forestry and to provide a pathway to the profession for deserving students.”

One scholarship will be awarded each year to a student in SFA’s forestry program. Recipients will receive $10,000 annually for both their junior and senior years. This funding will be paid directly to the student’s university prior to the fall and spring semesters, and can be designated by the student to pay any combination of tuition, books, room and board. In addition, RMS will offer each scholarship recipient an optional full-time, paid internship during the summer between his or her junior and senior years.

To be eligible, an applicant must be a full-time student; have declared a major in forestry; be slated to attain at least junior status by the beginning of the upcoming fall semester; and maintain a cumulative GPA of at least 3.0 through graduation.

RMS was founded in 1950 by John M. Bradley, a Yale University forestry graduate, and Harry E. Murphy, a graduate of Pennsylvania State University’s school of forestry. For more information, please visit resourcemgt.com.

Congratulations to Dean Sarger, senior forest management major and 2018 recipient of the resource management scholarship.

To apply for the resource management scholarship, complete SFA’s official scholarship application at goo.gl/zYsZbt.
Stephen F. Austin State University’s spatial science program is using the latest technology in unmanned aerial systems, commonly known as drones, to provide an entirely new vantage of Appleby’s historic Bethel Cemetery. The technology will enable caretakers to precisely document and map the more than 1,500 plots dating back to 1887 when it was founded alongside Bethel Baptist Church.

Bill Shumate, president of the Bethel Cemetery Association, said he reached out to Dr. Daniel Unger, Kenneth Nelson Distinguished Professor of remote sensing and geographic information systems at the ATCOFA, following the East Texas GIS, GPS User Group meeting held at the college in February.

“I was intrigued by what the professors were able to do with drone technology and realized I have an application for it,” Shumate said.

Only the boundaries of the cemetery are surveyed currently, Shumate explained, enabling him to remotely determine the section and row in which a person is interred, but not the precise plot.

His ultimate goal is to develop a plat, a map showing the precise divisions of a piece of land, that will visually display the relative location of every gravestone in the cemetery. Past attempts to do so using Google Maps have been unsuccessful due to a lack of high-resolution imagery.

Last month, Unger traveled to the cemetery with a drone in tow to collect 4 gigabytes of high-resolution imagery obtained by simply flying a predetermined flight path over the area.

“It’s interesting to see the pattern that they laid out the plots in,” Unger said. “It’s definitely not linear.”

At 131 years old, it is unsurprising that the cemetery holds secrets in the form of unmarked graves, but Shumate and members of the Bethel Cemetery Association are doing their best to shed light on the location’s history and inhabitants.

“There are graves that are unmarked, and some are actually visible on the digital imagery,” Shumate said. “Obviously in the last 131 years some burials have gotten by us, but we have located what we believe are unmarked graves through depressions in the ground or some other indicator. Those locations have been marked with a white cross.”

Leona Hunt is believed to be the first documented interment in the cemetery in 1887.

The Bethel Cemetery Association hosted its annual picnic in April where Shumate revealed the imagery gathered as well as his progress on creating the cemetery’s first plat.
Dr. Jeremy Stovall recognized for teaching excellence

Dr. Jeremy Stovall, associate professor of silviculture, was one of seven faculty members recognized at the 2018 Teaching Excellence Awards Convocation held in April.

Stovall joined the ATCOFA in 2010. He received his Bachelor of Science from Clemson University, his Master of Science from the University of Vermont and his doctoral degree from Virginia Tech.

Stovall teaches dendrology and silviculture, among a number of other graduate and undergraduate courses. Each summer, he teaches a travel course on field ecology in the southern Appalachian Mountains. His research focuses on restoring severely disturbed ecosystems using various silvicultural tools, such as herbicides, mechanical site preparation and thinning. Stovall also serves as the faculty advisor to the Sylmans, SFA’s timber sports team that has won five of the past six Southern Forestry Conclaves.

The Teaching Excellence Awards were established in 1994 to honor outstanding classroom teachers at SFA. Each of the university’s six colleges selects a faculty member to receive the annual award based on knowledge of subject matter, quality of lectures and assignments, enthusiasm for teaching, interest in and availability to students, commitment to continuous improvement, and contribution to the quality of teaching at SFA by assisting and encouraging other faculty members.

Professorships awarded

Dr. Daniel Unger, professor of remote sensing and geographic information systems, and Dr. Matthew McBroom, associate dean and professor of forest hydrology, were awarded forestry professorships in recognition of their efforts in teaching, research and service.

Beginning Sept. 1, Unger began holding the Kenneth Nelson Distinguished Professorship. Unger received a Bachelor of Science from Purdue University, a Master of Science from the Pennsylvania University, and a doctoral degree in forestry from the University of Idaho. He joined the ATCOFA in 1998 and since that time has worked with colleagues to develop a robust spatial science program that provides a unique emphasis on applications in natural resources management.

McBroom holds the Lacy Hunt Distinguished Professorship. McBroom received a Bachelor of Science, Master of Science and doctoral degree in forestry from Stephen F. Austin State University. McBroom has built a national reputation as a forest hydrologist and is often asked to serve on state and regional committees and advisory panels addressing water quality issues.
Dr. Jason Paul

Jason Paul joined ATCOFA this fall as an assistant professor of environmental science. Paul, who will graduate with a doctoral degree in soil science from Texas A&M University this December, received both his Bachelor and Master of Science in environmental science from SFA and brings more than a decade of professional experience ranging from solid waste management to wetland delineation and remediation.

Jones said he plans to use his personal experience as an environmental scientist to prepare students for future careers.

“I utilize my experience as an environmental scientist to teach and train students in the disciplines necessary to become a successful environmental professional,” Paul said. “A student should be able to then apply what is learned during the instructed course to solve real-world environmental problems commonly faced by multiple industries, agencies and municipalities.”

Paul’s research interests focus on contaminant transport and spatial distribution through the evaluation of soil and water chemistry, mineralogy and hydrology.

“I utilize an interdisciplinary approach to evaluate applicable solutions to complex environmental issues faced by multiple industrial sectors, chiefly in energy production and waste management,” Paul said.

Paul will teach advanced environmental health and safety, wetland delineation and functional assessment, environmental assessment and management, as well as other courses yet to be determined.

“My goals at ATCOFA are to prepare students for both the technical and ethical challenges they will face in their future career; challenge students in research to develop new techniques that help improve the efficiency and/or effectiveness of environmental characterization, assessment and remediation of soil and water resources impacted by industrial practices and processes; and to be a mentor to students through responsible teaching, research and service,” Paul said.

When not teaching or conducting research, Paul said he can be found recreating outdoors, woodworking and spending time with his family.
Dustin Black recently joined ATCOFA as the beef farm supervisor at the Todd Agricultural Research Center.

“My duties include daily care of all cattle, maintenance of all equipment, and upkeep of all things beef farm related,” Black said.

In addition to his role at the beef farm, Black will serve as co-advisor of the Department of Agriculture’s Beef Cattle Show Team with Dr. Erin Brown, professor of animal science.

“My goals for the beef farm are to keep improving the quality of our herd as well as improve hands-on learning for all students,” Black said.

Black earned a Bachelor of Science in animal science from SFA in 2017. Prior to beginning this position, he worked as a veterinary technician for small and large animals.

Henry “Hank” Still joined ATCOFA as the supervisor of SFA’s Broiler Research Center in 2018. As supervisor, Still is responsible for the care and maintenance of the facility’s poultry as well as the management of student workers.

Still received a bachelor’s degree in poultry science from the University of Arkansas and gained experience in the industry through employment at the university’s poultry farm. Additionally, Still completed an internship in Brazil with Cobb-Vantress Inc., a global poultry research company.

“Overall, each of these experiences prepared me to run SFA’s broiler farm,” Still said. “I hope to continue to broaden my knowledge of live production and research so that I can provide ethically grown chicken for our community.”

Drawing on his own experience as a student worker, Still said he hopes to provide SFA students with the structure, experiences and knowledge that will allow them to be successful as they transition into professional careers.

“It is awesome being able to be a part of the SFA community,” Still said. “My grandparents met on this campus, so it was already a part of my history.”
Students receive first place at statewide GIS forum

Two Stephen F. Austin State University students received top honors at the Texas Natural Resources Information System’s Texas GIS Forum held during October in Austin.

Jamison Brandenburg and Logan Hope, both seniors pursuing a Bachelor of Science in Forestry at SFA’s Arthur Temple College of Forestry and Agriculture, presented their original poster, “Trammel’s Trace: The First Road to Texas From the North,” alongside more than 10 other presenters from a variety of industries.

Trammel’s Trace was the second major route from the United States into Spanish-occupied Texas and played an integral role in connecting travelers from Kentucky, Tennessee, Missouri and Arkansas with the El Camino Real in Nacogdoches.

Hope said he first became interested in the history of the route after meeting historian and author Gary Pinkerton at a local festival. In 2016, Pinkerton published a book chronicling the history of this early gateway to Texas.

Brandenburg and Hope collaborated with Pinkerton to collect data points and create a precise map of the route. Their work can be viewed on the TNRIS website at goo.gl/3usvgr.

SFA students showcase research at Texas A&M University

Eight undergraduate and graduate students from Stephen F. Austin University’s Arthur Temple College of Forestry and Agriculture and the College of Sciences and Mathematics presented their research to a diverse crowd of students and faculty at Texas A&M University’s Ecological Integration Symposium held this April.

SFA forestry graduate students Jamie Hooker and Mason Danheim were awarded second and third place respectively in the Graduate Student Poster Presentation category. Hooker’s research is focused on quantifying the survival and growth of pine species across East Texas soil types, while Danheim’s research seeks to document the regeneration dynamics following prescribed fires in oak-hickory forests located in Arkansas.

The Ecological Integration Symposium is an annual interdisciplinary event that brings together a diverse group of leading scientists and students from the fields of ecology, evolutionary biology and conservation. The symposium provides an excellent opportunity for both local and visiting students to showcase their work and engage in meaningful dialogue with invited speakers.
For the first time in the chapter’s decades-long history, the Stephen F. Austin State University student chapter of the Society of American Foresters clinched the national title of Society of American Foresters Quiz Bowl champions, defeating 32 collegiate teams from across the U.S. during this year’s national convention held in Portland, Oregon.

“It’s very rewarding to see the early morning practices as well as the hard work and persistence finally pay off,” said Dr. Rebecca Kidd, assistant professor of forestry at SFA and SAF faculty advisor.

The competition, held annually at the SAF National Convention, is a quiz-based competition challenging student chapters to answer a broad range of technical and academic questions that span the discipline of forest resource management. Kidd said student chapters must sign up months in advance to be organized into a tournament bracket.

“The range of topics includes wildlife, habitat management, hydrology, soil science, silviculture, ecology, spatial science, agro-forestry, recreation management, policy and economics,” Kidd said.

Christopher Longman, forest management senior and president of the SFA student chapter, said when forming a quiz bowl team, the chapter makes sure to include students from a range of forestry majors offered through SFA’s Arthur Temple College of Forestry and Agriculture.

“One of the questions we answered correctly was something we just learned in forest hydrology two weeks ago,” Longman said.

Although the team displayed a strong showing throughout the competition, besting universities such as Pennsylvania State University and the University of California at Berkley, Longman admits there were a few nerve-wracking moments.

“In our quarterfinal match, we went into overtime in sudden-death format,” Longman said. “That was probably the most nervous moment we experienced.”

Longman added that the team’s victory is a definite reflection on the quality academics offered at SFA.
Nicholas Schiwitz named top scholar

Forest wildlife management junior Nicholas Schiwitz was named Arthur Temple College of Forestry and Agriculture’s top scholar at the 2018 SFA Undergraduate Research Conference.

His research, titled “Interspecific Variation in Activity Level of Larval Anurans: Implications for their Distribution Along the Hydroperiod Gradient,” examined how interspecific variation in activity rate among larval anurans (frogs and toads) corresponds to distributions of different species along the hydroperiod gradient. Ultimately, Schiwitz found species that maintained a high activity level, even under the threat of predation, utilize ephemeral ponds that are at a high risk of drying. Species that reduced or maintained low activity levels utilize permanent ponds that have a more stable environment with a greater diversity and abundance of predators. These results highlight that this trade off can have consequences on the ecologies and life histories of these species and provide insight as to how it scales up to affect organization of ecological communities.

As top scholar, Schiwitz presented his research and findings at the Undergraduate Research Symposium in April.

ATCOFA Top Scholar Finalists

Sara Brown, Cooper Kirklin, David Lee, Nina McCallum and Nicky Vermeersch
“Effects of Runoff on Nutrient and Oil & Grease Concentrations in the SFASU Ag Pond”
Faculty sponsor: Dr. Sheryll Jerez

Margaret Campbell and Schaeffer Shockey
“Comparing the CTLA Hazard Rating of Trees to Unmanned Aerial Systems Video”
Faculty sponsor: Dr. David Kulhavy

Hailey Hester
“Acoustic Analysis of the Advertisement Calls for Ten Anuran Species from the Gran Chaco Ecoregion of Bolivia”
Faculty sponsor: Dr. Christopher Schalk

Megan Knippers, Brandon Billeck and Marshall Woodruff
“Preference of White Tailed Deer among Six Common Texas Oaks”
Faculty sponsors: Drs. Jeremy Stovall and Chris Comer

William Kruckeberg
“First Year Survival of Sonderegger Pine, A Natural Hybrid, on Two Sites in East Texas”
Faculty sponsor: Dr. Brian Oswald

Wade Lang and Courtney Biles
“A Student Hosted Cattle Sale as an Approach to Experiential Learning”
Faculty sponsor: Dr. Erin Brown

Jessica Pruneda, Lana Welford, Andre Saenz and Jessica Mattox
“Pineywoods Native Plant Center BioBlitz – Exploring Our Backyard”
Faculty sponsor: Dr. Shelby Laird
The Sylvans, Stephen F. Austin State University's timbersports team, claimed victory at the 61st annual Southern Forestry Conclave hosted by Abraham Baldwin Agricultural College in Tifton, Georgia, making this the winningest six-year period in the organization's 61 year history.

"I could not have asked for a better group of students," said Dr. Jeremy Stovall, associate professor of forestry and Sylvans faculty advisor. "They worked tirelessly through much adversity and earned a hard win."

The team competed in a series of technical and physical events against 12 other Southern universities, including North Carolina State University, Clemson University, Auburn University, Virginia Tech and Louisiana State University.

In addition to their official Conclave win, the Sylvans also won the first Conclave Quiz Bowl in which the participating universities faced off to answer technical questions regarding natural resources and natural resources management.

While the excitement of the physical timbersport events can often overshadow the far more subdued academic portions of the competition, Christopher Longman, a senior forestry major and president of the Sylvans, said the team's academic prowess is of great importance and speaks to the quality education provided by the college.

"We have strong relationships with our professors, and their focus on teaching prepares us to excel in technical events at Conclave and in our careers after we graduate," Longman said. "Our success in technical events and in the quiz bowl is evidence of the value of a forestry degree from SFA."

Members of the Stephen F. Austin State University timbersports team, the Sylvans, personified the university’s mascot during the second annual Lumberjack Match held Sept.15 at the Ouachita County Fair in Camden, Arkansas.

During the Lumberjack Match, participating universities competed in a range of traditional timbersport events, such as crosscut sawing, bowsawing, log chopping, and axe and knife throwing.

The Sylvans placed first in men’s crosscut sawing; men and women’s bowsawing; Jack and Jill crosscut sawing; single buck crosscut sawing and knife throwing. The team took second and fourth place in women’s crosscut sawing and axe throwing, respectively.

“Our students were professional and did an excellent job representing the university and the Arthur Temple College of Forestry and Agriculture,” said Dr. Jeremy Stovall, associate professor of forestry at SFA and Sylvans faculty advisor.

The University of Arkansas at Monticello finished in second place, followed by Louisiana Technical University and Louisiana State University.
Environmental science senior David Lee completed a three-month internship with Georgia-Pacific at their plywood mill located in Corrigan, Texas. From inspecting devices for worker safety to reviewing reports and collecting samples for laboratory analysis, Lee said his responsibilities were varied and meaningful.

“I could go on for days about the things I’ve learned from my summer internship,” Lee said. “Everyone I worked with was friendly and helpful. Tracey Posey, the environmental manager, is incredible at her job and is very understanding and helpful. Ray Ricks, the environmental tech, was like a brother to me. I’m so lucky to have had them as my educators during this summer.”

Lee’s time with Georgia-Pacific will continue after his graduation in May 2019 as he joins the company’s leadership program in Atlanta, Georgia. Following three months in Atlanta learning more about the variety of plants managed by the company, Lee would then spend roughly one year at a plant somewhere in the U.S. completing a designated project. Following this, he will be eligible to hold the position of environmental manager within the company.

Agribusiness senior Hunter Leatherman completed an internship with Nolan Ryan Beef this summer. The company, based in Round Rock, Texas, is owned by Baseball Hall of Fame member and Texas native Nolan Ryan.

Leatherman worked under the company’s director of operations and played an integral role in ensuring orders were filled and shipped across the state. In fact, if you attended a baseball game this summer, you can thank Leatherman for the opportunity to enjoy a ball park hot dog.

“My favorite part about the job was the fact that I was the person in charge of getting our product to places like Minute Maid Park in Houston,” Leatherman said. “I’ve always been a big baseball fan, and knowing I was the one responsible for getting the hot dogs to a major league baseball game was exciting.”

In addition to distribution, Leatherman also organized blind taste tests to compare Nolan Ryan’s grass-fed beef against competitors and assisted with marketing.

“The internship benefited me tremendously because I got real-world experience with a company that directly correlates with what I desire to do after I graduate,” Leatherman said.

Environmental science senior Allyson Holman completed a three-month summer internship in the environmental technical services division of Oncor Electric Delivery, Texas’ largest transmission and distribution electric utility.

“My main duties were to assist the environmental technical services division with petroleum storage tank and waste compliance,” Holman said. “I also worked in the lab and went with coworkers who delivered presentations on the Migratory Bird Act and Bald and Golden Eagle Protection Act.”

Holman had her own experience protecting birds during the internship by assisting in the relocation of a hawk nest located on a transformer in Abilene. Once removed, the nest was transported to a bird rehabilitation center where they will be raised and released into the wild.

Holman said this internship allowed her to see how many different divisions there can be in a company.

“Onecor is a great company to work for,” Holman said.
Dylan Adkins

Urban forestry senior Dylan Adkins helped make Texas’ largest city a bit greener through his 10-week internship with Bartlett Tree Experts in Houston.

Adkins served as a groundsman for the majority of his internship, assisting foremen and climbers by maintaining safety, removing brush and transporting equipment into the trees as needed by the arborists. Once Adkins completed required training, he began using chainsaws and polesaws on a daily basis.

“They taught me how to make the correct cuts when pruning and how to fell trees for removal,” Adkins said. “During my last two weeks I was able to climb trees using a climbing rig and prune from within the tree.”

Adkins learned about the internship opportunity through the career fairs hosted by ATCOFA and said he was truly impressed by how the representatives of Bartlett Tree Experts shared a genuine passion for tree care and their profession.

“The company culture also was one of the best things about the internship,” Adkins said. “The company takes good care of their workers by listening to their needs, concerns and ideas.”

Emily Lozano

Spatial science senior Emily Ruth Lozano began an internship as geographic information systems technician for Nacogdoches County under the tutelage of SFA alumnus John Streeb, Nacogdoches GIS and 911 addressing coordinator. The internship, which began in May, will end upon her graduation from ATCOFA in May 2019.

Lozano said she works on a variety of projects, including field data collection, map production and updating multiple vector GIS datasets used by the local 911 dispatchers and first responders.

“All of my outputs are reviewed and then merged with the existing database, which makes my efforts feel valuable,” Lozano said. “I have learned vital skills in my field and have so much more confidence that I will be qualified for the workforce after graduation.”

Lozano said she was initially hesitant to apply for the internship because she felt there would be far more qualified and desirable applicants.

“What I didn’t really realize was that I was hired with the expectation that I wouldn’t know everything necessary complete my projects,” Lozano said. “That’s where the learning comes in. I would recommend asking as many questions as needed to understand what’s being asked of you.”

If you have news or images you would like to share, email Sarah Fuller, outreach coordinator, at fullersa@sfasu.edu.
AGRICULTURE

Roshaan Ahmed Khan Niazi

Under the direction of Dr. Michael Maurer, professor of horticulture, Roshaan Ahmed Khan Niazi is analyzing how different irrigation systems affect the establishment of bent grass from seed and Bermuda grass from sod in sand-based systems.

“I choose this research project because there has been limited research on this topic, and I wanted to work on water-efficient projects like sub-surface drip irrigation,” said Niazi.

Field trials occurred last September on the SFA intramural fields and this February in the Department of Agriculture greenhouse.

“Our research is analyzing the changes in soil organic matter and coarse root contribution to carbon sequestration for the purpose of carbon accounting after afforestation.”

Wedge’s field work took place on three STMicroelectronics properties during the summer of 2017. During that time, he excavated the roots of loblolly pines in an effort to quantify and model the contribution roots can have on total carbon sequestered in loblolly pine plantations.

Wedge, who earned a Bachelor of Science in plant and soil science from Oklahoma State University, said he has greatly enjoyed the diversity of the graduate program.

“The faculty and staff are amazing too,” Wedge said. “In true Texan fashion, I felt welcomed from the start.”

Following graduation, Wedge said he would like to earn professional geoscientist licensure as a soil scientist.
**Forestry**

Josué González

Josué González is conducting a comprehensive analysis of conservation methods being implemented around the world that may be successfully applied in Costa Rica.

“Costa Rica is home to a rich variety of plants and animals alike,” González said. “While this country has approximately 0.03 percent of the world’s landmass, it contains 5 percent of the world’s biodiversity.”

Because of this, ecotourism is a major industry within the country and a primary source of revenue.

“Different conservation programs from several countries will be analyzed to determine if applying a similar program will benefit Costa Rica,” González said.

Following this, economic analyses and feasibility studies will be conducted to determine if the programs are viable before they are presented to interested parties at the Universidad de Costa Rica and/or leaders of Costa Rica’s National System of Conservation Areas.

**Resource Communications**

Trenton Stiefel

Trenton Stiefel has partnered with the Nacogdoches Independent School District to investigate the relationship between outdoor education, adolescent behavior and academic performance in two middle schools.

“In comparison to fun, outdoor memories of past generations, Generations Y and Z have memories of more sedentary activities largely due in part to the exponential growth of access to technology and entertainment over the last two decades, as well as urbanization cutting off the ease of access to nature,” Stiefel said.

This shift also has seen the advent of more social and psychological disorders, such as attention deficit disorder, he added.

“Studies have shown that symptoms of many of these illnesses can often be alleviated by spending time outdoors or within a more natural environment,” Stiefel said.

His research will collect and compare qualitative and quantitative data through multiple surveys, student interviews and academic performance measures.

“This data will be analyzed by comparing a test group (outdoor education) versus a control group (technologies class) using the available demographics data and schools,” Stiefel said. “Behavior data also will be collected using school monitoring systems, student self-evaluations and teacher evaluations.”

Stiefel is working under the direction of Dr. Shelby Gull Laird, assistant professor of forestry.
While many view summer break as a time to unwind and relax, others embrace it as an opportunity to immerse themselves in a new culture while working long hours to accomplish meaningful projects. This past June, Stephen F. Austin State University students from the academic disciplines of agriculture, early childhood education, environmental science, forestry, nursing and social work did just that — dedicating almost two weeks of their summer break to accomplish a variety of projects in rural Haiti.

This marks the second summer in which SFA has partnered with One Foot Raised, a local mission-based nonprofit organization founded by SFA alumni. While the organization was officially established in 2016, its founders, Becky and Zac Weems, have led outreach teams in the country for a decade. The Weems said they work closely with leadership from a small number of villages to learn the exact needs of residents and then work hand-in-hand with them to achieve these goals.

In partnering with SFA, the Weems said they now have access to a vast amount of knowledge and skills in the form of faculty, staff and students.

This year, Dr. Angela Jones, assistant professor of nursing within SFA’s DeWitt School of Nursing, and Dr. Shelby Gull Laird, assistant professor of forestry within SFA’s Arthur Temple College of Forestry and Agriculture, led a team of 13 SFA students who completed tasks ranging from human health and wellness to agricultural development in three rural villages.

“The whole goal of the trip for the nursing students was to immerse themselves in health care in the context of another culture, take what they’ve learned here and see how they can adapt it to meet the needs of a community using the services it has,” Jones said. “It was absolutely a priceless experience.”

Jones and the six participating nursing students conducted health clinics and home visits in the villages of Lamonthe, Quicroif and Thomassin where they focused on basic wound care, women’s health and distributed reading glasses after conducting rudimentary vision tests using a vision chart in French Creole, the official language of Haiti.

“We used shards of a broken mirror to show them their reflection wearing the new glasses, and it was amazing,” Jones said. “That was probably our favorite thing we did.”

Students from social work and elementary education assisted in various capacities, including organizing and facilitating projects.

“They were a tremendous help in providing support and educational games to the children of those seeking medical care,” Jones said.

Brennan Morrell, a senior nursing student, said the experience inspired him to seek ways to improve his nursing skills and gave him renewed gratitude for the American health care system.

“I kind of went into the trip with the mindset that I know everything I need to know to be a nurse right now, but in coming back I realized how much more I could do to be a better nurse,” Morrell said.

This introspection and personal growth is precisely what Jones hoped would occur.

“I really saw who they are as nurses,” Jones said. “I saw their hearts and passion.”

While overall emphasis was placed on the bipedal residents of Haiti, the four-legged variety was not neglected.

Drawing on her experience of keeping show rabbits, DeeAnna Berry, a junior studying animal science within SFA’s Department of Agriculture, developed a comprehensive brochure on rabbit
“Being able to travel to different places to see how they care for their crops or their livestock versus how we do it in the U.S. is a real eye opener and can show us how to be more resourceful,” Berry said.

DeeAnna Berry, animal science junior, right, developed a comprehensive brochure on rabbit husbandry that was translated into French Creole and distributed to a group of women in the mountain-top village of Quicroif. Pictured, she and forestry graduate student Trenton Steifel prepare the rabbits for transport.
Alumnus named SAF Fellow

Stephen F. Austin State University alumnus Eric Gage has been named a Society of American Foresters Fellow, recognizing his more than two decades of contributions to timberland management and service in the field of conservation.

Gage received a Bachelor of Science in Forestry from SFA’s Arthur Temple College of Forestry and Agriculture in 1992 and since that time has served in a variety of professional leadership roles ranging from division forester with Molpus Timberlands Management to a real estate broker serving individuals and timberland investment management organizations. Gage also served in a number of leadership roles with the Texas Chapter of the Society of American Foresters, including the position of chair from 2013 to 2014.

In addition to his professional leadership, Gage is actively engaged in civic outreach, including the Boy Scouts of America and the school advisory board of St. Patrick Catholic School.

“I am especially honored to receive the recognition as a Fellow in SAF,” Gage said. “To be recognized by my fellow foresters is very humbling.”

According to the Society of American Foresters, this prestigious award distinguishes SAF members for long-standing service to forestry at the local, state and national level. Recipients are recognized as ambassadors for the advancement of the profession.

Alumna and husband named finalists for Outstanding Young Farmers and Ranchers Award

Jordan and Braden McInnis have been announced as 2018 finalists for the Texas Farm Bureau’s Outstanding Young Farmers and Ranchers Award.

Jordan, who graduated with a Bachelor of Science in agriculture from Stephen F. Austin State University's Department of Agriculture, is a high school agriculture science teacher in Elkhart, Texas, where she teaches floral design, livestock production and animal science.

The couple raise cattle and grow corn, wheat, cotton, soybeans, sorghum and hay in Anderson County. Both serve on the Anderson County Farm Bureau Young Farmers and Ranchers Committee as District 9 representatives.

The winner of the competition will receive a three-quarter ton, four-wheel-drive pickup and a $5,000 cash award sponsored by Farm Credit.

According to the Texas Farm Bureau, the competition recognizes the accomplishments of some of the state’s top agricultural leaders between the ages of 18 and 35 and rewards their had work, dedication and determination.
Alumni Spotlight

Dr. Lauris Hollis

As is the case with many individuals who pursue a career in natural resources, Dr. Lauris Hollis can trace the roots of his passion for the outdoors to his childhood.

“I grew up in the Neches River Basin in the heart of the Big Thicket,” Hollis said. “As a child, the forests and swamps were both a playground and a ‘supermarket.’ As a result, I recognized their value at a young age.”

As time passed, however, Hollis said he witnessed the loss of many of the wetlands, coastal prairies and forested habitats of the region. This realization prompted him to take action.

Hollis received a Bachelor of Applied Arts and Sciences in 2010 and a Master of Science in environmental science in 2013 from SFA. In May 2018, Hollis made history as the first African-American male to earn a doctoral degree in oceanography and coastal sciences from Louisiana State University.

Hollis also received the College of the Coast and Environment Outstanding Dissertation Award and the Ted Ford Memorial Scholarship for outstanding marine research during his last semester at LSU.

Hollis said that receiving these two awards was a tremendous honor considering the graduate students of LSU’s College of the Coast and Environment conduct innovative and complex research across the globe, tackling global challenges such as climate change.

Now a post-doctoral scientist at LSU, Hollis is investigating the effects of soil biogeochemical processes and anthropogenic stressors, such as herbicides and excess nutrients, on the biomechanical properties of the belowground biomass of dominant emergent wetland plants known as macrophytes.

“My role as a wetland ecologist is to ascertain how these biomechanical responses to multiple stressors translate into ecosystem-level effects on the coastal environment,” Hollis said. “This is particularly relevant to the Mississippi River Delta, which lost 16.6 square miles of coastal wetlands between 1985 and 2010. That is a rate that is equivalent to the loss of one football field of wetlands per hour.”

Hollis said his time serving in the United States Army embedded within him the discipline, focus and tenacity that facilitated his success in graduate school.

Following his tenure as a post-doctoral student, Hollis said he hopes to become involved in wetland restoration and mitigation projects on the Gulf Coast or in the Mississippi River watershed.
Alumni Spotlight

Aron Kulhavy

Although Aron Kulhavy’s career in municipal service has resulted in him relocating to the city of his alma mater’s greatest rival, his love for SFA and Nacogdoches have not waned.

“My pride for SFA increased greatly since moving to Huntsville,” Kulhavy said. “Orange is definitely the preferred color here, but everyone knows my favorite color is purple.”

Kulhavy, who received a Bachelor of Science in environmental science and a master’s degree in public administration from SFA, currently serves as city manager of Huntsville and, despite his loyalty to SFA, takes his responsibility to serve Huntsville citizens very seriously.

“I believe that local government is the public function that most affects people’s everyday lives,” Kulhavy said. “We are responsible for ensuring citizens’ most basic needs are met.”

Kulhavy’s municipal services began early, enabling him to ascend to the rank of Eagle Scout in the Boy Scouts of America.

While attending SFA, Kulhavy also worked in various capacities for the City of Nacogdoches – from part-time recreation assistant to city planner following graduation.

Since moving to Huntsville in 2008, Kulhavy also served as city planner, public works director, community and economic development director.

“All of my time working for the cities of Nacogdoches and Huntsville helped me build a strong foundation to be successful in my current role,” Kulhavy said. “My degree in environmental science was a broad-based foundation that exposed me to many different aspects of the world around us and exposed me to many ideas I have used throughout my career.”

Kulhavy said he is very proud of the progress the city has made in generating retail opportunities, which also provide jobs and additional revenue for the community.

“One of the most rewarding feelings is having a new business or subdivision open after working with a developer from beginning to end on a project,” Kulhavy said. “Taking a raw piece of land and some drawings on paper and turning it into a place where people can live or shop is something to experience.”
Travis Jowell

As an intern at Esri’s International User Conference in 2001, Travis Jowell had the opportunity to attend as many presentations and lectures as he wanted. Little did he know that his curiosity for a social event sporting a unique anagram would uncover a new interest and guide his future career path.

“Looking at the schedule, I saw an entry entitled PUG Drink Social,” Jowell said. “I read the description and found it was actually the Petroleum User Group, and they had a social after their yearly user conference meeting, which I attended.”

Jowell said he attended the social and quickly gained an interest in how new geographic information systems technologies were being used in the petroleum exploration and transmission sectors of the oil and gas industry.

After graduating in 2012 with a Master of Science in environmental science and minor in spatial science, Jowell began working for Halliburton, one of the world’s largest providers of products and service to the energy industry. Currently, Jowell works in Houston as the solution lead for Landmark, a division within Halliburton that develops exploration and production software and applications.

In this position, Jowell provides coordination and input throughout the entire process of developing, troubleshooting and testing new software.

“When customers in the Houston area need technical GIS assistance with our software, I am able to go onsite into their production environment and diagnose issues,” Jowell said. “Sometimes this even includes fixing GIS problems not related to our software or general end-user learning of GIS concepts.”

Jowell said that on occasion he still references notes taken during his graduate-level GIS courses at SFA.

“Technology is moving at an astounding pace in the GIS field and our industry as a whole,” Jowell said. “New types of data formats have been created and older ones I used in grad school are considered legacy now.”

Jowell said that with this growth, a student earning a Bachelor of Science in GIS will have a wide industry field to choose from when they begin their career search. For those seeking a graduate degree in the field, he recommends attending industry conferences in potential areas of interest prior to graduation.
More than $300,000 in scholarships awarded for the 2018 academic year.
Academics

44 unique academic publications and contributions during the 2017-18 academic year

$727,000 in grants awarded to the college during the 2017-2018 fiscal year

3 patents granted to the National Center for Pharmaceutical Crops during the 2017-18 academic year

Outreach

More than 3,000 FFA and 4H students visited and participated in agriculture competitions during the 2017-18 academic year.

13,000 community members reached through SFA Garden’s special programming for adults and children during 2017-18

Assistant professor of forestry’s research featured in October 2017 issue of Texas Parks and Wildlife Magazine.