

1986–1995

Helping Texas Grow toward New Frontiers

During this decade, the Texas A&M College of Agriculture was renamed the College of Agriculture and Life Sciences to reflect a growing emphasis on microbiology, biochemistry and biophysics, genetics, genomics, and other life sciences disciplines. The College and the agencies moved into the decade with a renewed vigor and vitality. As in the formative days of the land-grant colleges, knowledge was gained through scientific experimentation and innovation. That knowledge base expanded during this decade and was shared through extension to help improve lives in Texas, nationwide, and throughout the world.

Texas A&M's Ranching System Group, part of what is now the Department of Ecosystem Science and Management, began work in 1987 on the technology that became the basis of the Grazingland Animal Nutrition Laboratory. The Texas Agricultural Extension Service launched the Boer Goat/Meat Goat Initiative to study the cross of Boer goats and Spanish goats for better meat quality, and Extension also began research on the composition of horse feed that would lead to an equine professionals symposium beginning in 2005. In the Department of Animal Science, researchers began to study reproductive disorders in livestock that would also have implications in human fertility and newborn health.

On another forefront of animal health, the Texas Veterinary Medical Diagnostic Laboratory became responsible for providing drug-testing services to the pari-mutuel horse and greyhound racing industries. It also took over responsibilities for the Salmonella Pullorum-Typhoid Program and administration of the poultry diagnostic laboratories in Center and Gonzales, formerly managed by the Texas Agricultural Experiment Station.



TOP: Biochemistry and Biophysics Building

ABOVE: TVMDL's receiving room, where hundreds of specimens arrive daily for testing, c. 1987

RIGHT: Students test the nutritional values of cooking oils, 1990.



The Texas Urban Forestry Council is created. Made up of leaders from municipal governments, nonprofit tree groups, trade groups, and state agencies, the council advises the state forester on urban forestry issues. It also promotes tree protection, planting, and care through its educational conferences and workshops.

1986

1986

The Department of Biochemistry and Biophysics begins offering undergraduate degree programs in genetics.





The Texas Forest Service initiates the Oak Wilt Suppression Project, which continues today.

1988

1987

The Texas Agricultural Lifetime Leadership (TALL) Program is established. Administered by Agricultural Extension, the program provides advanced leadership training for agriculture and other professionals.



New research geared toward producing healthier vegetables began with the creation of the Vegetable Improvement Center in 1992. The center's work expanded to include fruit seven years later, and it is internationally renowned for developing fruit and vegetable varieties higher in nutritional and disease-fighting compounds and for proving the benefits of these compounds to help inform consumers.

The College of Agriculture and Life Sciences and the Texas Agricultural Extension Service began to better serve the increasingly dynamic and changing community by focusing on the development of leadership within the diverse communities in Texas and the nation. Extension's Agricultural Lifetime Leadership Program was created to help prepare agricultural leaders for the state, the county, and the suburban and urban communities. In addition, in cooperation with the Kellogg Foundation, the Texas Extension Education Association, formerly known as the Texas Home Demonstration Association — created in the 1920s to teach club members ways to improve their homes and family life — helped to implement the Family Community Leadership Program to foster empowerment and community development among women. In 1990 the Agricultural and Natural Resources Policy Internship Program was established in the College of Agricultural and Life Sciences at Texas A&M. The program sends students to intern for legislators at both the federal and state levels, providing the experience of a lifetime and a springboard to their chosen career.



ABOVE: Extension Clothing Specialist Alma Fonseca gives a sewing demonstration, c. 1989.

RIGHT: Texas A&M University campus, 1980s



Texas A&M University receives the patent for a biomass-fueled fluidized-bed gasifier, including a two-stage cyclone system for removing char, through the work of Biological and Agricultural Engineering Department scientists C. B. Parnell and W. A. LePori.

1988



1989

The College of Agriculture is renamed the College of Agriculture and Life Sciences.



The Texas Racing Act stipulates that TVMDL has primary responsibility for providing drug-testing services to the pari-mutuel horse and greyhound racing industries.

1989



Studying Animal Nutrition to Improve Range Management

In 1987, Texas A&M's Ranching System Group, now part of the Department of Ecosystem Science and Management, began work on the technologies that have become the foundation of the Grazingland Animal Nutrition (GAN) Laboratory. The GAN lab studies animal nutrition, grazing behavior, and range conditions by using near-infrared reflectance spectroscopy (NIRS) to conduct fecal profiling. This analysis gives ranchers the information they need to manage their rangelands to provide the best diet for livestock and wildlife. The technique was proven in ranch trials conducted in the early 1990s, and working equations and tests were developed and published by Jerry Stuth and Robert Lyons in 1992. The GAN Lab provides nutritional profiling throughout the United States and in many foreign countries, including Argentina, Mongolia, Afghanistan, and East Africa. The lab is part of the Texas A&M AgriLife Research Center for Natural Resource Information Technology.

The Family Community Leadership Program is established by the Texas Extension Education Association, with funding by the Kellogg Foundation, to build leadership in women of Texas communities.

1990



1990

The Agricultural and Natural Resources Policy (ANRP) Internship Program is established. During its 20th anniversary, in 2010, the program celebrated having sent approximately 700 College of Agriculture and Life Sciences students to intern for legislators in Washington, D.C., and Austin, Texas. The students have experiences that last a lifetime and provide a firm foundation for the career of their choice.

1989

Texas A&M University is designated a Space Grant institution, making it among the first four universities to hold all three designations: Land Grant, Sea Grant, and Space Grant.

Amid nationwide concern over environmental issues, President George H. W. Bush expanded urban forestry programs. As a result, the Texas Forest Service adopted a new role as administrator of the America the Beautiful grants program, which helps communities develop long-term forestry projects.

Community growth and development, Texas agriculture and natural resources, and advancements in science had many dimensions during this decade, and our agriculture programs continued to lead the way.



Urban renewal and community development take on greater importance in the 1990s, and Texas Master Gardeners play a big role.



The Rose Breeding and Genetics Program is established in the Department of Horticultural Sciences, and Robert Basye establishes the Chair in Rose Genetics and Breeding to “unlock the treasures of the entire rose genus.” The major goal of the program is to develop unique sources of disease- and pest-resistant germplasm that gardeners can enjoy and breeders and hybridizers can use in developing new rose cultivars.

1990



A beef cattle gene-mapping project that identifies genetics for growth, carcass, and tenderness traits begins at the Agricultural Research and Extension Center Research Station at Angleton.

1990



1990

The College of Agriculture and Life Sciences forms intercollegiate faculties to provide for interdisciplinary research and graduate education.



1991

Texas Agricultural Extension and the Department of Animal Science establish the Ranch to Rail program in association with the King Ranch and livestock feedyards in Randall County to demonstrate the relationship between genetics, nutrition, and health management and the production of quality products for consumers — as well as profits for the industry. The program leads to the development of a calf health-management protocol called VAC-45.

Nationwide concern over global warming, deforestation, and energy conservation leads President George H. W. Bush to expand federal urban forestry programs. The America the Beautiful urban forest grants program, administered in Texas by the Texas Forest Service, helps communities and nonprofit organizations develop long-term community forestry programs. The Forest Stewardship Program, a federal multi-resource technical assistance and cost-share program, is also established.

1991





LEFT: New studies in rangeland ecology and management focus on wildlife populations in Texas.



CENTER: Dr. Michelle Frantzen, TVMDL diagnostic analytical chemist, performs routine maintenance on an electrospray ionization mass spectrometry instrument, which detects small volumes of chemical compounds in feed, bait, stomach contents, or brain samples.

RIGHT: Dr. Leonard Pike, first director of the Vegetable and Fruit Improvement Center



The 72nd Texas Legislature transfers implementation of the Salmonella Pullorum-Typhoid Program and administration of the poultry diagnostic laboratories in Center and Gonzales from the Experiment Station to TVMDL.

1991

The Extension Service holds a feed manufacturing workshop for national horse feed companies on the Texas A&M campus. The success of the program led to the implementation of an equine professionals symposium beginning in 2005.

1992

1991

The Department of Range Science is renamed Rangeland Ecology and Management.





Volunteers: The Hands and Heart of Texas A&M AgriLife Extension

Volunteers help make nearly every Texas A&M AgriLife Extension Service program possible, from 4-H and Youth Development to the Master Wellness Program. Today, more than 100,000 individuals serve as AgriLife Extension volunteers annually, assisting Extension agents and specialists throughout the state in numerous programs and extending the reach of those programs to every community. In return they gain knowledge and skills that will benefit them throughout life, along with the satisfaction of knowing they are helping their fellow Texans improve their lives and make the state a better place in which to live. Extension volunteers contribute more than four million hours of service each year — the equivalent of more than 2,000 full-time employees — and add a value of more than \$80 million to the state of Texas.



Agricultural engineering professor Edward A. Hiler is named deputy vice chancellor and dean of Agriculture and Life Sciences and director of the Experiment Station.

1992



1992

Animal science professor Fuller Bazer, who in 1977 published work showing that the hormones estrogen and prolactin cause pigs to recognize that they are pregnant and later showed that this signaling system is triggered by the protein interferon tau, begins assembling a research and faculty team to study reproductive problems in livestock. Their research can also be used to solve infertility and low-birth-weight problems in human newborns. The team has won national recognition for its groundbreaking work in maternal nutrition and fetal development.

1992

The Vegetable Improvement Center is established as part of the Department of Horticultural Sciences, with Leonard Pike as director. Fruit was added to the name and scope in 1999. The center's work focuses on developing fruit and vegetable varieties higher in nutritional and disease-fighting compounds and on scientifically proving these health-promoting properties.





The Extension Service launches the Boer Goat/Meat Goat Initiative, which tests the cross of Boer goats introduced from South Africa with native Spanish goats for improved meat quality and performance.

1993

The Texas legislature passes House Bill 842, making the Texas Forest Service the state's lead agency for providing and coordinating training and response to wildfires and forest fires; it also directs the agency to open a statewide fire coordination center and employ regional fire coordinators.

1993



1993

The first phase of the Center for Southern Crop Improvement is built on the College Station campus.





LEFT: Spatial Sciences students use Global Positioning System equipment to plot points that will help electronically define the perimeter of a park.

CENTER: Texas wildfire activity began increasing in the early 1990s, and the Texas Forest Service became the state's lead agency for coordinating response.

RIGHT: Students tend flowers in the Horticulture Department's garden.



Scientists Rosana G. Moreira, Maria Barrufet, and Susan Sun, in the Department of Biological and Agricultural Engineering, determine that 60 percent of the absorption of oil by fried foods occurs during the cooling process. Their findings lead to the development of frying processes that reduce oil absorption, creating a healthier and more palatable product.

1994



1994

The Mapping Sciences Laboratory, which began in 1982 as a remote-sensing and geographic information systems (GIS) laboratory in what is now the Department of Ecosystem Science and Management, is founded as a university-industry partnership.

October 1994

Aggie Horticulture, the website of the horticulture program, begins providing information on the web. Visitors can obtain Extension publications, fact sheets, newsletters, and academic course websites and can research information from all participating faculty on a continuous basis. *Aggie Horticulture* is one of the most active horticultural information sites in the world, serving over 40 million pages to 6.7 million discrete users in 2010.



Agricultural development major Brooke Leslie is elected the first female student body president of Texas A&M University.

1994



1995

Experiment Station and Extension range scientists Darrell Ueckert and Allan McGinty, at the Research and Extension Center at San Angelo, develop the Brush Busters program to help landowners sort through the confusing information on herbicides and treat only the plants they want to control. The system, made available through a series of publications, saves money and protects the environment from overuse of herbicides.





College of Agriculture and Life Sciences

Students: Leaders Ready to Serve

Leadership has always been a focus for students in the College, and the statistics prove that they have been dedicated to their alma mater, their communities, state, and nation. Former College of Agriculture and Life Sciences students have become successful businessmen and women, top-notch professors and classroom teachers, county Extension agents, agribusiness leaders, biomedical researchers, plant and animal breeders, bankers, lawyers, doctors, veterinarians, agricultural engineers, military officers, environmental consultants, government officials, and leaders in many other professions.

From the founding of Texas A&M through its early growth years, agriculture graduates made up just over 60 percent of the total student body, with the numbers totaling 12,242 from its founding through 1911, 12,816 from 1911 through 1926, and 20,672 from 1926 through 1951. By 1976, following the admission of women to the university in 1963, the number of agriculture graduates had doubled, with 41,856 grads from 1951 through 1976, compared with 81,403 for the entire university.

The number grew exponentially between 1976 and 2001, when the total number of agriculture grads was 106,172, compared with 278,938 for the university as a whole. From 2002 to 2011 alone, the number of agriculture graduates was 34,582, compared with 101,676 for the whole university.

Ninety-nine agriculture graduates are or were class agents, including presidents, and 83 are former yell leaders, while 558 are current or former A&M Club presidents (31 percent of the total for the university). Ten agriculture grads are or were members of the Texas A&M University Board of Regents, 23 percent of the total for the university, and 45 agriculture grads have been named Texas A&M University Distinguished Alumni.

One out of a total of three Texas A&M graduates who have served as president of the university was an agriculture grad — Jarvis E. Miller '50, who served as president from August 1, 1977, to July 10, 1980. Miller also served as director of the Texas Agricultural Experiment Station.

Five agriculture graduates are current or former members of the Texas legislature in recent years or hold a state administrative office. Dan M. Gattis '90, class president while at Texas A&M, served in the Texas House of Representatives, District 20, from 2002 to January 2011. Ryan A. Guillen 2000 has served in the Texas House of Representatives, District 31, from 2003 to the present. Mark S. Homer '84, an animal science graduate, served in the Texas House of Representatives, District 3, from 1999 to 2010. Douglas T. "Todd" Staples '84, an agricultural economics graduate, served in the Texas House of Representatives from 1995 to 2001, the Texas Senate from 2001 to 2007, and has served as Texas Agriculture Commissioner since 2007. Agricultural economics graduate and former Agricultural and Natural Resources Policy (ANRP) intern Trent Ashby was elected to the Texas House of Representatives in November 2012. He is the first former ANRP intern elected to state office. A number of College of Agriculture and Life Sciences graduates have served in other public offices, including Texas Governor Rick Perry '72, an animal science graduate.