AG illustrated

New Mascot is Chicken

Lotus in Alabama

Ray Jones, Legendary Alum

volume 4, issue 2

The Bonds pose in front of a trellis of dahlias on the grounds of their Loachapoka home.

For Dwight and Ruth Ann Bond…
It All Began at Auburn

By Jamie Creamer

They met in the summer of '55, in the cafeteria of the men's dorm at Alabama Polytechnic Institute. She was a dietician in need of somebody to work the cash register. He was an API student ever on the lookout for an extra job to help pay tuition.

She's kind of iffy as to whether it was love at first sight for her, but Dwight Bond admits without a moment's hesitation that Ruth Ann Nunn swept him off his feet.

"I was pretty well taken with her right off the bat," recalls Bond. "I decided rather quickly that I owed it to her to tell her my finer points."

He got the job; she stole his heart; and thus the stage was set for a whirlwind courtship—they were wed that December—and a marriage that has spanned five decades.

"Some things you just know, and it didn't take us long to decide we were a team," Bond says as he sits at the kitchen table in their Loachapoka home. "When you see something that's good, you've got to use your good judgment and go with it."

Not only was that his approach toward choosing his life's partner; it was also the attitude that guided him into an exceptional career in the poultry industry.

The Barbour County native had arrived at what today is Auburn University in September 1952 to pursue a bachelor's in agricultural education. He got that degree four years later, but along the way, he became intrigued by poultry science. One reason was the field itself.

"Even then, the poultry industry was growing by leaps and bounds," Bond says. "I could see a whole lot of opportunity."

An even bigger impetus, though, was Allen Edgar, an Auburn University poultry professor known worldwide for developing poultry vaccines and a key figure in the development of the poultry industry in the Southeast. It was through his part-time student-worker job at the API poultry research farm that Bond met Edgar, and he was highly impressed.

Apparently the feeling was mutual, because Edgar and others in the poultry department actively recruited Bond for graduate school.

Bond earned his master's degree in poultry science from API in 1956, went to Fort Knox, Ky., for a six-month stint with the U.S. Army Reserve, then returned with his wife to Auburn, where he took a position as a poultry research associate working under Edgar.

Off and on, he toyed with the idea of getting his doctorate.

(continued on page 2)

Fillmer Named Executive Director of New Institute of Natural Resources

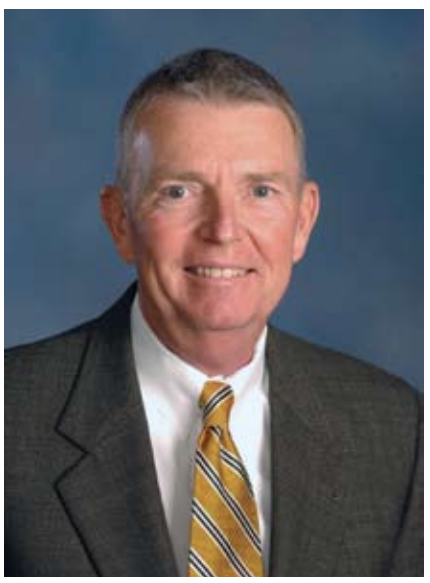
Taylor, Lockaby Named Center Heads

Larry Fillmer, a senior executive and CEO with more than 35 years of experience in organizational management, has been named executive director for the newly created AU Institute of Natural Resources by AU President Ed Richardson.

Fillmer has worked at AU since 2005 as a development director for major gifts and corporate relations. Before that, he served as president and CEO of the I-85 Corridor Alliance and for several corporations in the technology field.

"His experience in managing change is extensive and allows us to focus on bringing together the most critical areas connected to agriculture and natural

(continued on page 4)



Larry Fillmer

Ag Illustrated is a quarterly publication of the Auburn University College of Agriculture and the Alabama Agricultural Experiment Station (AAES). It is compiled and published through Ag Communications, the College and AAES information office. This publication is printed on Mohawk 50/10 paper, which is 15% recycled and is Green Seal certified.

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(BOND, from page 1)

"I was very interested in getting in the Ph.D. program, but I was reluctant because I wasn't sure I could cut it," Bond recalls. "But Dr. Edgar didn't have any doubt. He told me he knew I could do it. So, I hitched up my pants and got with it."

Bond attained that degree in 1966 and then entered the industry workforce. He spent the bulk of his career with what today is ConAgra Foods Inc., working first as a poultry pathologist.

In that role, he was "a trouble-shooter" up and down the production and processing lines on the lookout for procedures or techniques or strategies that could be altered in some way to improve his plant's bottom line.

After a few years, Bond decided to broaden his career horizons.

"I came to realize that the fast track in getting ahead in any industry was in management," Bond says, so he went for and landed the post of vice president of poultry operations for ConAgra, heading up five poultry complexes in Georgia, Alabama and Maryland.

Nowhere in Bond's vocabulary was the word "retire."

"I never even considered it," Bond says. "I assumed I'd die right on the job."

But the highly active Bond was dealt a fateful blow in 1992, when he was diagnosed with Parkinson's disease. The disease forced him to retire from ConAgra in 1995, but he continued to work as a private consultant for a few years more, advising poultry companies in the U.S., Israel and Russia.

"What I liked for them to do was to let me come in and look for problems that they could resolve and realize better plant yields, higher feed efficiency and the like," he says.

Bond credits his success professionally largely to his wife—a 1953 API home economics graduate who gave up her career to be "a full-time wife, mother and cheerleader"—and to their children, Cindy and Bill, who "made sacrifices and helped me by not getting in trouble."

"My family has always been super-supportive of me," Bond says. "They all had high expectations of me, and I had to be extra careful to live up to them."

For 16 years of Bond's time with ConAgra, the family lived in Enterprise, then in Arkansas for six. When he retired, they moved back to Loachapoka—"back," because that's where Mrs. Bond was reared and where they had lived during their early Auburn years.

In fact, they had lived right next door to Mrs. Bond's parents, Sallye and longtime Progressive Farmer editor Alexander Nunn.

"He (Nunn) would work in Birmingham during the week and come home on the weekends, because this is where he wanted to raise our family," Mrs. Bond recalls.

Bond insists the late "Mr. Alec" was a story in and of himself, and, indeed, Nunn—who was a staunch champion of agriculture and rural life and who, in the words of a state resolution honoring him in 2001, was a man "who personified the excellence, innovation and pioneering spirit that has made agriculture the state's leading industry"—has been the subject of many.

The 1924 API graduate started writing freelance for Progressive Farmer at the age of 15, as editor built the magazine into the nation's top farm production periodical, and was part of a team of writers that launched Southern Living in the 1960s. He is a member of the Alabama Agricultural Hall of Honor as a 2001 Pioneer Award winner.

"He was my role model," Bond says—high praise for one's father-in-law.

The Bonds see evidence of Nunn every day. For one thing, they live in what the family calls "the rock house," so named because Nunn used stones he collected from the local area for the façade of the house when he built it in the 1930s.

For another, there are the grounds surrounding the home. They still bear the fruit of Nunn's horticultural labors.

"He was an outstanding horticulturist, almost to the point of being a professional," Bond says. "He was really interested in grafting, and he taught me all sorts of techniques that I've used through the years. Most of these pecans in the orchard here, he and I grafted."

Nunn's fascination with all things horticultural rubbed off on his son-in-law and, eventually, on the Bonds' middle grandson, David, son of daughter Cindy Haggard of Memphis.

"David came and stayed with us for several days in July 2005, and any time Dwight was out in the yard, David was right there alongside him," Mrs. Bond says. "He was really interested in horticulture."

Three months after that visit, tragedy struck when 15-year-old David died from what doctors determined was a heart arrhythmia.

It was in David's memory that the Bonds in December 2005 established a scholarship endowment in horticulture at Auburn University.

That hasn't been the couple's only gift to Auburn. They have endowed a scholarship fund in the School of Forestry and Wildlife Sciences; they recently created a scholarship endowment in the Samuel Ginn College of Engineering—where son Bill is an alum and Bill's oldest son, Matthew, is a senior; and they have such an endowment in poultry science.

"Poultry's where I spent most of my working life," Bond says, "and Auburn's where that all began."

AU Faculty Mentor Indian Scientists Under Borlaug Fellows Program

When Pratap Chandra Das of India's Central Institute for Freshwater Aquaculture was tapped to participate in the relatively new Norman E. Borlaug International Agricultural Science and Technology Fellows Program, he had one request.

"I asked that I be allowed to train with Dr. (Claude) Boyd at Auburn University," Das said. "For aquaculture, Dr. Boyd is Number One in the world."

Das' request was granted, and this past October, he arrived in Auburn for five weeks of intense training under Boyd, AU fisheries professor and Butler-Cunningham eminent scholar in agriculture and the environment, and one of the world's most respected and influential fisheries and aquaculture researchers.

Das, who trained with Boyd in the areas of freshwater aquaculture pond soils management and water quality, was one of three scholars from India in Auburn as part of the Borlaug fellows program.

Borlaug fellow Muralidhar Moturi of India's Central Institute for Brackishwater Aquaculture worked some under Boyd, but his primary mentor was AU fisheries and allied aquacultures head David Rouse, who trained Moturi in brackishwater pond water quality and soils management.

Harinder Singh Oberoi, the third AU Borlaug fellow, studied in the area of biofuels under biosystems engineering associate professor Oladiran Fasina.

The Borlaug fellows program was launched in March 2004 in honor of Nobel Peace Prize laureate Norman E. Borlaug, who has often been hailed as the father of the Green Revolution.

Coordinated by USDA's Foreign Agricultural Service, the program is designed to promote food security and economic growth in developing and middle-income countries by increasing scientific knowledge and supporting collaborative research to improve agricultural productivity.

Involved in the Borlaug fellows program at AU fall semester were, from left, Billy Earle, campus coordinator of the Norman E. Borlaug fellows program; Pratap Das; Muralidhar Moturi; David Rouse; Oladiran Fasina; Harinder Oberoi; Claude Boyd; and Joyann Binsley, program coordinator at the U.S. Department of Agriculture.

In 2005, 17 U.S. universities hosted individuals from more than 30 countries through the program. 2006 was the first year of participation by both AU and India.

The program gives promising young scientists an opportunity to work closely with U.S. and international specialists in their fields of agricultural science. During four- to six-week training periods, selected fellows work closely with their chosen mentors, learn new research techniques, access fully equipped libraries and learn about public-private research partnerships. Fellows also have an opportunity to learn about graduate curricula in agricultural research.

December 2006 biosystems engineering graduate Mack Moncus is now at work as an environmental engineer in Montgomery.

Moncus's Will-do Attitude Translates into International Opportunity

By Jamie Creamer

Sure, Mack Moncus had heard since before he even got to Auburn University that the College of Agriculture offered international study opportunities.

And, yes, he'd thought in passing, how awesome would that be?

But that's about as far as he'd carried the idea—until one day early last year, when, seemingly out of the blue, biosystems engineering assistant professor John Fulton asked Moncus if he'd be interested in spending the summer studying in Germany.

"I said, 'Yeah, sign me up,' thinking he was joking, and he said, 'I've got your name down,'" Moncus says.

And it was just that simple. Summer 2006 found Moncus in Munich, for a three-month research stint at that city's Technical University. The cost-free visit was through the TransAtlantic Precision Agriculture Consortium (TAPAC), an exchange program open to students from AU and five other American and European universities.

"It was a great experience," Moncus says of the trip. "I met so many people from Japan, China, Australia and all over; it opened my eyes to the world.

"The only bad thing about it," he says, "was that three months wasn't anywhere near long enough."

Besides learning a new culture and making what he feels certain will be lifelong friends from around the globe, Moncus says he was blown away by the research aspect of his visit.

"I used precision ag to test a 'smart' bearing (one equipped with electronic sensors) for forage harvesters at different loads and positions to simulate field work," he says. "I was the first person in the world to collect this kind of data, which was pretty cool."

And the results of his research are actually being used, to improve the bearing's durability. That's even cooler.

The Munich experience definitely was a highlight of Moncus' college career, which wrapped up in December when he graduated with a degree in biosystems engineering—a major that allowed him to combine his interest in engineering with his love for agriculture.

He's now employed with an environmental engineering firm in Montgomery.

Though his selection for the TAPAC program seemed to Moncus to come from out of left field, Fulton says otherwise. He'd been watching Moncus in action for several years, and he knew the Adairsville, Ga., native would represent AU well.

"I approached Mack because he had a strong interest in precision agriculture and because of his communication skills and his willingness to try different things—which in this case included exploring a new culture," Fulton says. "He's also the type of person who, when he starts something, diligently completes it. His work ethic, educational interests and personal skills made him a fit for the TAPAC program."

In the biosystems engineering department, Moncus early on proved himself to be a rock-solid individual; a workhorse willing to take on even thankless tasks; and, above all, a leader.

For instance, he helped rejuvenate the Auburn student chapter of the American Society of Agricultural and Biological Engineers. He joined that organization in his sophomore year at Auburn, "but we basically just went through the motions" of being a pre-professional club.

When Moncus was elected president for 2005-06, he set out to turn the organization around.

"Some of us got excited about it and went out and started recruiting members," Moncus says. "We went from 15 or 16 active members to more than double that the next year."

And the club became active, too—to the point of being named last spring as the most outstanding student ASABE branch in the Southeast. The group remains strong under the presidency of Daniel Mullenix and in March will host the Southeast regional ASABE student rally.

Moncus says he is what he is because of his dad, Ed, a high-school FFA adviser and an AU agricultural education alumnus.

"He's always had a leadership role in my life and in the community, and he always encouraged me to be a leader, not a follower," Moncus says.

Dad was responsible, too, for instilling a strong work ethic in son.

"He taught me that when you see something that needs to be done, don't wait for somebody to tell you to do it," Moncus says. "And whatever you're doing, give it 100 percent and stick with it till you're done."

"I get pride out of knowing other people depend on me," he says. That trait helped earn him the chance of a lifetime.

"I was really lucky because this (international experience) just kind of came along for me," Moncus says. "But would I recommend that others really look for study-abroad opportunities? Most definitely."

sidebar

Precision Ag Exchange Program's Focus

The TransAtlantic Precision Agriculture Consortium is a forum for promoting student and faculty exchanges, common research projects and mutual understanding among six American and European universities, with precision agriculture as the vehicle for achieving those goals.

Three AU students already have been approved to participate in the TAPAC program this summer. They include horticulture senior Conner Trott, who will visit Italy's University of Padova, and College of Ag sisters Taylor Boozer, a master's student in plant pathology, and agronomy junior Whitney Boozer. The Boozers will spend the summer involved in research projects at the University of Thessaly in Volos, Greece.

The TAPAC program, which has the slogan "Spend a semester on another continent…at no cost," is funded by the United States Department of Education and the European Commission's EU-US Cooperation Programme in Higher Education.

AU students interested in precision agriculture and in learning more about participating in TAPAC this summer can contact Paul Mask, Extension assistant director for Agriculture, Forestry and Natural Resources programs, at maskpau@auburn.edu or 334-844-5490.

For more on TAPAC and its exchange program, visit www.nespal.org/tapac/.

(FILLMER, from page 1)

resources to positively impact the university and the state," Richardson said when he announced Fillmer's appointment.

The institute will bring the resources of the Alabama Agricultural Experiment Station and Alabama Cooperative Extension System together under one umbrella organization that will include research and outreach efforts under way in the AU College of Agriculture and School of Forestry and Wildlife Sciences.

In addition to leading the institute, Fillmer will direct two new research centers at AU: one that focuses on alternative energy and another focusing on water resources. Richardson earlier this year committed $3 million to Auburn's alternative energy initiative, capitalizing on the university's research expertise in forestry, engineering and agriculture and positioning AU as a national leader in converting natural resources into fuels. Similarly, an Alabama water resources center, which will be established on the AU campus, will address water issues in Alabama including those related to research, policy and outreach.

Richardson appointed Steve Taylor, department chair and professor of biosystems engineering, as head of the alternative energy committee and to lead the soon-to-be-established AU Center for Bioenergy and Bioproducts. Graeme Lockaby, associate dean and professor of forestry and wildlife sciences, will lead the water resource center efforts.

According to Richardson, establishment of the new institute and Fillmer's leadership in launching the institute mark a turning point at Auburn, providing an opportunity to build on past accomplishments and effectively position the university for the years to come.

Fillmer earned his bachelor's degree in business administration from Auburn and also holds a master's degree in industrial management from the University of Alabama. He is a distinguished veteran of the U.S. Air Force and a recipient of the Air Force Commendation Medal, First Oak Leaf Cluster and Department of Defense Meritorious Service Medal.

Richardson Wins Service to Agriculture Award

Auburn University President Ed Richardson recently received the Alabama Farmers Federation's highest honor—the Service to Agriculture Award—for his work to reinvigorate Auburn's role in agriculture.

The award was presented to Richardson by Federation president Jerry Newby during the federation's 85th annual meeting held in Mobile in December 2006.

Newby said during the presentation that Richardson had "refocused, reenergized and redefined" the university's role as a land-grant institution.

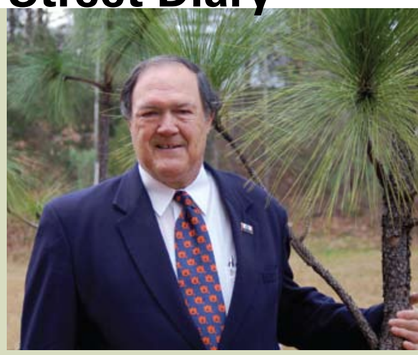
One reason for the award was Richardson's effort to establish an Institute of Natural Resources, an umbrella institute that includes the College of Agriculture, School of Forestry and Wildlife Sciences, Alabama Cooperative Extension System, Alabama Agricultural Experiment Station, alternative fuels and water initiatives and other environmental units.

Richardson told the annual meeting audience of about 1,500 federation members that the institute is being formed "so that we can all pull together to wrap around one agenda, and that's to promote agriculture.

"Once this happens," he said, "you're going to see Auburn in a much more responsive posture.… Auburn is going to be far more responsive in the future than in the past."

BORLAUG NAMED QUALITY OF LIFE WINNER–Alabama Gov. Bob Riley (left) recently joined AU College of Human Sciences Dean June Henton and AU Provost John Heilman (right), in presenting the 2006 International Quality of Life Award to Norman Ernest Borlaug, a Nobel Prize winner known as the father of the Green Revolution. The award was given in December 2006 at the United Nations Building in New York City. In addition, the 2006 College of Human Sciences Lifetime Achievement Award was given to celebrated golf champion Nancy Lopez Knight.

Roosevelt Street Diary



Dr. Richard Guthrie

The year 2007 has dawned brighter and stronger for agricultural and natural resource research in Alabama.

A primary reason for this is that a lawsuit, which began in 1983 and has affected the Alabama Agricultural Experiment Station and the Alabama Cooperative Extension System for more than two decades, has been settled, further opening the door for an already-strong collaboration among Alabama's land-grant institutions.

The dismissal order, issued on Nov. 17, 2006, by Judge Harold Murphy of the U.S. District Court, stated that all issues between Alabama A&M University and Auburn University have been resolved with regard to the ACES, AAES and the research and experiment projects at Alabama A&M. The original court order went into effect in 1990 and was extended in 1995 for an additional 10 years. The suit was part of an effort by the Justice Department to remedy discriminatory funding practices that existed throughout the Southeast's higher-education systems.

The really good news is what happened during the period of the court order. Alabama A&M, Auburn and Tuskegee universities joined together in a research partnership known as the Alabama Agricultural Land Grant Alliance. AALGA now funds a variety of collaborative research projects among the three universities which are, in turn, helping improve the lives and economies of farmers, rural Alabamians and many others throughout the state.

We now have a true partnership among the three land-grant universities in Alabama, a joint venture that the state Legislature has funded and that stakeholders throughout Alabama have embraced. Faculty members from all three universities are now working jointly on numerous research projects that are supported with funds provided by AALGA.

During this renewal time at the beginning of the new year, there is a sad note for agriculture in Alabama. Mr. Charles Glover, of Cullman, was killed in an automobile accident in November 2006. Mr. Glover was an agricultural alumnus, a former AU trustee and a wonderful friend. We will miss him!

Dr. Richard Guthrie
Dean, College of Agriculture
Director, Alabama Agricultural Experiment Station

Ann Gulatte says her three-monitor computer system is invaluable in helping her perform her duties, which include administering the College of Agriculture's scholarship program.

The First Face Folks See

Gulatte Aims for Welcome Feeling in Comer

By Jamie Creamer

It was a chilly November morning in 1999, and Ann Gulatte had the jitters. It was, after all, the first day on a new job for the single mother of two.

But as soon as she walked into College of Agriculture's administrative offices in Room 107, Comer Hall, she realized her nervousness had been for naught.

"From the minute I entered the door, I felt welcome and at home," Gulatte says today of that job as Student Services office assistant. "I absolutely loved it from the start. I knew I had been blessed to have found a job in this place."

Now, seven years later, as the dean's office administrator and the first face folks likely see when they enter Comer, Gulatte says she's determined to duplicate that same at-home feeling for visitors, faculty and fellow staffers.

"I want everybody who walks in to the College of Agriculture to know they're welcome here and to know that, whatever they need, we've got time for them," Gulatte says. "It all comes back to treating other people like you want to be treated."

That's one of the guiding principles Gulatte tries to follow in life.

Here's another one: Take responsibility for yourself.

"Whether you succeed or fail in life, it's all up to you," Gulatte says. "A support network is really important, but in the end, no one is responsible for you but you."

That attitude first exhibited itself in earnest 20-something years ago, when Gulatte, an Auburn High School graduate, was barely out of her teens. She was a student at Southern Union Community College in Opelika, a waitress at the local Po' Folks restaurant and a new mom to baby daughter Marquita.

"I definitely had a full plate," Gulatte says. "I won't say it was easy, but I never questioned whether I could and would handle it. My mom (Annie Welch) and my grandmother (Lois Lockhart) were there to help out when I needed them, but they had taught me well that nobody's responsible for you but you, that your desire to succeed is all on you."

Over the next few years, amidst a job switch to sales at JCPenney, Gulatte put college on hold and went instead to an Opelika vocational school, taking clerical and computer courses.

Through much of this time, she and her children—Marcus was born in 1990—lived in public housing. Because she knows its importance in lives, Gulatte is a strong proponent of public housing—IF it isn't abused.

"What government assistance is for, whether it's welfare or public housing, is to help you get a step up so you can get on with your life," she says. "It frustrates me to see people who are willing to sit on it for the rest of their lives, with that attitude that somebody 'owes' it to them. But public housing definitely serves a purpose for people who use it to move up and move out."

For Gulatte, the ticket to moving out of public housing came from public housing itself.

"One day I went to fill out a form at the public housing office, and they had a clerical opening, and I got the job," Gulatte recalls. "It was the first time I'd had benefits and a decent salary—decent, at least, for somebody who didn't have a degree."

Gulatte worked for the next eight years with the Auburn Housing Authority. She got promoted twice and, in the meantime, achieved a major milestone in her life: She bought a house.

"I'd always had it as a goal to own my own home before I turned 30, and in 1992, that happened," Gulatte says.

She bought under Auburn's then-new Affordable Housing Program, which offers low-interest home loans to middle- and low-income families. Today she sits on the board that oversees that program.

The job move to Auburn University in 1999 presented Gulatte with the chance to start working toward another goal: a return to school. She began taking core classes spring semester 2006, with her sights set on earning a degree in agricultural economics—and eventually, an MBA.

"School was always very, very difficult for me, and it still is, but I'm determined to do this," Gulatte says. "It's all about making myself more marketable. I've got too long left in the workforce to not think about advancing."

She's also hoping to set a positive example for Marcus, a tenth-grader at Auburn High, and for Marquita and, even one day, for Marquita's young son, Ashton.

"I'm so trying to be a role model for them," Gulatte says. "I want to help them see how important an education is to achieving what you want in life."

In Memorium

Charles G. Glover

Charles G. Glover, 83, a former AU Board of Trustee member and long-time friend of Auburn agriculture, died Nov. 20, 2006.

Glover, a resident of Cullman who represented the 7th Congressional District as an AU trustee, was appointed in 1990 by then-Gov. Guy Hunt. He served as a trustee for 13 years. As a trustee his interest was in agriculture, and he served on the agriculture, academic affairs, Auburn University Montgomery and investment committees.

Reared on the family farm at Culpepper Hill west of Cullman, Glover graduated from Cullman High in 1942. He farmed for the next two years before entering the service. Glover served in the U.S. Army as an infantryman in Germany, where he was seriously injured during World War II.

After the war, he returned to the farm and attended St. Bernard College for two years before coming to Auburn (then called Alabama Polytechnic Institute), where he received a degree in agriculture science.

He worked for the Farmers Home Administration in Wetumpka for five years, then returned home to Cullman where he was a Cullman businessman, developer and community leader who owned a commercial real estate business and once owned an automobile and truck dealership.

He was an avid Auburn football fan and was interested in war-related history, enjoyed traveling, gardening and reading and was a life deacon and trustee of First Baptist Church in Cullman.

Glover was active in the local Republican Party and many local civic organizations and was presented the highest civic award in Cullman, the Edelman Award. He served a year as president of the Cullman Chamber of Commerce and on the local parks and recreation as well as the Cullman Fair boards. He was a member of the Lions Club for 55 years and was recognized as a Melvin Jones Fellow.

Glover is survived by his wife, Marcia Moulton Glover; four daughters; two sons; a sister; a brother; 16 grandchildren; and five great-grandchildren. He was preceded in death by his parents, Freeman and Mary Smith Glover, and two former wives.

The family requests that memorials be made to the Auburn University Foundation.

News from the Alabama Cooperative Extension System—"Your Experts for Life." For more information on these or other Extension-related stories and projects, visit www.aces.edu.

Pod Blasting for Profit

By Jim Langcuster

Pod blasting. It may sound like an adolescent videogame, but for peanut growers, it's serious business.

It can even mean the difference between a big profit and a squandered opportunity. That holds especially true for the growing number of producers in eastern and central Alabama who have begun growing peanuts along with cotton within the last few years.

As many of these rookie peanut farmers are learning, knowing when to harvest peanuts can be tricky.

"With cotton, you just walk the fields and count the bolls and pins that are open," says Mitch Lazenby, a Lee County cotton grower who, along with his father, began growing peanuts for the first time last year.

Unfortunately for Lazenby and other growers, this sort of casual eyeballing doesn't work with peanuts, which, unlike cotton bolls, grow underground.

Settling on the right time requires hands-on investigating—cracking open some of the peanuts to gauge their maturity. It is precisely why pod blasting has turned out to be such a valuable harvest aid.

The first step involves collecting a representative sample from the field.

"We get three whole plant samples from different parts of the field containing the harvestable-size nuts," says Leonard Kuykendall, an Alabama Cooperative Extension System regional agent who has been instrumental in introducing growers to the technique.

Next, peanut pods acquired from these plants are placed in a wire mesh container and subjected to intense blasts of compressed air from a sprayer. What remains is a pod devoid of its outer covering.

Based on their color, the pods then are sorted on a large chart ranging from dark to very light brown.

"It all has to do with color," Kuykendall says. "The darker the color, the more mature they are."

The prevailing color of these pods is then figured in with other important harvest-related considerations, such as the number of acres that must be harvested, coupled with weather forecasts.

"It's an excellent way to determine when to dig," says Kris Balkcom, an Extension peanut specialist based in the Wiregrass region of southeast Alabama who has been acquainting growers with the process.

"You can't always go by the calendar alone," he says.

Indeed, as Balkcom stresses, just because a cultivar is marketed as a 135-day variety doesn't necessarily mean it can be harvested in only 135 days—a point driven home to most eastern and central Alabama growers during this year's unusually dry summer.

It is cases such as these that have underscored the value of pod blasting.

Kris Balkcom (left), an Alabama Cooperative Extension System agronomist, Leonard Kuykendall, a regional Extension agent, and Jeff Clary, a retired Lee County Extension coordinator now serving Extension as a crop consultant, demonstrate how peanut maturity can be assessed according to color, using a specially designed chart.

"When the rains are really spotty, we really need to go by the [pod casting] calendar," Balkcom says.

Area growers, many of whom first began growing peanuts last year, seemed convinced.

"Pod blasting is one of the most valuable things Extension has offered us in this whole process [of transitioning to peanuts]," Lazenby says. "As a grower, you just don't know when to pull the trigger and begin this process."

Kuykendall, along with Jeff Clary, first began offering the pod blasting service last year. They consider themselves especially fortunate for the help they've received along the way from Balkcom and co-worker and long-time peanut specialist Dallas Hartzog.

For the 56-year-old Clary, a retired Extension county coordinator who still serves growers as a crop consultant, the transition to pea-nuts after an entire career working almost exclusively with cotton has been challenging but nonetheless rewarding.

"As educators, we have to understand that learning is as much a part of teaching as the transfer of knowledge," he says.

"It's been a challenge not only for me but [also] for the growers. But fortunately, they're very good growers, and they're willing to learn."

In increasing numbers, eastern and central Alabama cotton growers have begun adopting peanuts as an alternative crop, though not solely for its economic appeal. Peanuts work as an excellent rotation crop for controlling yield losses associated with root-knot and reniform nematodes, serious soilborne pests.

That's precisely the reason why eastern Alabama grower Tom Ingram and his sons decided to jump into peanut production last year.

"I figured that if I didn't make any money with peanuts the first year, I could at least still look forward to good yields with cotton the following year," he says.

To remove their hulls, the peanuts are placed in a wire mesh container and subjected to intense blasts of compressed air from a sprayer. Shorn of their hull, they then can be assessed for their maturity based on color.

Based on their color, the pods are sorted on a large chart ranging from dark to very light brown. The darker the color, the more mature they are.

SHRIMP SUCCESS—Lowndes County farmer Lee Jackson recently hosted AU President Ed Richardson and Alabama state Sen. Hank Sanders on his farm and gave them a progress report on his saltwater shrimp enterprise. Jackson is one of the first Black Belt farmers to join the saltwater shrimp production effort.

Fisheries Program Expanding Options in Black Belt

Saltwater shrimp are harvested in the wild or raised at commercial operations along the coast. That's true most of the time. But, here in Alabama, you can find farmers raising saltwater shrimp about 200 miles inland, in the state's Black Belt region.

Auburn University, the Alabama Cooperative Extension System and the Alabama Agricultural Experiment Station are helping farmers take advantage of an underground saltwater aquifer.

Jesse Chappell, an Extension aquaculture specialist and an Auburn University assistant professor who is spearheading the effort, says the saltwater aquifer was probably trapped millions of years ago when south Alabama was below sea level.

"While the water is not as salty as the water in the Gulf of Mexico, the salinity is high enough for shrimp production in ponds," says Chappell.

Chappell's work is part of Auburn University's Black Belt Initiative, which is striving to enhance business and economic opportunities in the region.

Last fall, Chappell and Lowndes County farmer Lee Jackson gave AU President Ed Richardson and Alabama state Sen. Hank Sanders a progress report on the saltwater shrimp program. Sanders' efforts in the Legislature were instrumental in securing the original funds.

Jackson expected to harvest about 5,000 pounds of shrimp from each of his two ponds and he was praised by Richardson for his willingness to join the saltwater shrimp effort while the program is still so new.

"The aquaculture elements of our initiative have tremendous potential to improve the quality of life for residents of the Black Belt," said Richardson. "Farmers like Lee Jackson who are willing to partner with us as we develop new economic opportunities are critical to the overall success of the initiative."

Extension interim director Gaines Smith echoed Richardson's comments.

"It's tremendously gratifying seeing our outreach efforts changing the way people do business as well as transforming their lives," said Smith.

David Rouse, head of AU's Department of Fisheries and Allied Aquacultures, says while there are only four producers raising saltwater shrimp in the area, they could have a tremendous economic impact.

"We estimate that this year's harvest will be about 400,000 pounds from 80 acres of ponds," says Rouse. "That means revenues of more than $900,000."

NEW ENVIRONMENTAL STEWARD—Frank Owsley, on right, has been named the new program leader for environmental stewardship and animal agriculture for the College of Ag, the Alabama Agricultural Experiment Station and Extension.

Owsley Assumes Environmental Stewardship Role

Frank Owsley, AU associate professor of animal sciences and an Alabama Cooperative Extension System animal scientist, has been appointed program leader for environmental stewardship and animal agriculture at Auburn University.

A critical part of Owsley's new role will be integrating current research and Extension efforts associated with environmental stewardship and animal agriculture into a cohesive multidisciplinary effort. Another key facet of his work will be establishing a strong link between environmental stewardship-related research and Extension efforts at the university level and livestock producers at the grassroots.

Owsley also will serve as a liaison with federal and state regulatory agencies, representing the needs of livestock producers and research and Extension faculty on issues related to environmental stewardship and animal agriculture.

"Two of the biggest things we've lacked until now are research and Extension efforts more closely tailored to the needs of our livestock efforts and stronger dialogue with our federal and state regulatory agencies," Owsley says.

Meeting those needs will be at the top of his agenda, he adds.

Owsley will represent Auburn University's environmental stewardship program in multi-state programming efforts throughout the region and country. He also is charged with identifying critical needs associated with animal agriculture-related stewardship and securing funding to address these needs.

In addition, he will be responsible for ensuring that research and Extension efforts remain primed for the challenges facing animal agriculture in the future.

"We need a proactive approach to ensure that farmers understand the environmental challenges they face, whether these stem from regulatory changes at the state or federal level or from some other facet of society," Owsley says.

Owsley will spearhead an effort comprised of faculty currently working on animal-related environmental issues in the College of Agriculture, the Alabama Agricultural Experiment Station and the Alabama Cooperative Extension System. Scientists and specialists from the departments of Animal Sciences, Biosystems Engineering, Agronomy and Soils and Agricultural Economics and Rural Sociology will form the core of this program, forming links to other colleges and departments when needs arise.

"This position is vital to the future of Alabama animal agriculture," says Paul Mask, assistant director for agriculture, forestry and natural resources with the Alabama Cooperative Extension System.

"Animal agriculture is a major facet of the state's economy, and responsible stewardship of waste products will play a critical part in this industry's future.

"Frank Owsley's background makes him ideally suited to this critical position."

These views are shared by Richard Guthrie, dean of Auburn's College of Agriculture and director of the Alabama Agricultural Experiment Station.

"Dr. Owsley's experience, especially his work with animal environmental stewardship, underscores his qualifications for this assignment," Guthrie says.

"He is a team player and has the leadership skills needed to be successful in this new position."

A Texan with deep family roots in Alabama, Owsley earned his bachelor's degree in animal science in 1977 and his master's degree in animal nutrition in 1979 from Texas A&M University. He completed his doctorate in animal science in 1982 from Texas Tech University.

In his previous role as an animal scientist, Owsley specialized in swine production and management, animal nutrient management, swine production systems and animal welfare.

News and information from the College of Agriculture's academic departments. More information on the departments and their activities is available from:

Agricultural Economics & Rural Sociology
Curtis Jolly, Interim Chair
334-844-4800
www.ag.auburn.edu/agec

Agronomy & Soils
Joe Touchton, Head
334-844-4100
www.ag.auburn.edu/agrn

Animal Sciences
Wayne Greene, Head
334-844-4160
www.ag.auburn.edu/ansc

Biosystems Engineering
Steve Taylor, Head
334-844-4180
www.eng.auburn.edu/programs/bsen

Entomology & Plant Pathology
Art Appel, Chair
334-844-5006
www.ag.auburn.edu/enpl

Fisheries & Allied Aquacultures
David Rouse, Head
334-844-4786
www.ag.auburn.edu/dept/fish

Horticulture
David Williams, Head
334-844-4862
www.ag.auburn.edu/hort

Poultry Science
Don Conner, Head
334-844-4133
www.ag.auburn.edu/poul

Rochester Named Irrigation Association 2006 Person of the Year

Eugene W. Rochester

Eugene W. Rochester Jr., a professor emeritus in Auburn's Department of Biosystems Engineering whose research increased uniformity of irrigation with hard-hose travelers, was named the 2006 Irrigation Association Person of the Year.

Established in 1952, the Person of the Year honor recognizes individuals for outstanding contributions toward the acceptance of sound irrigation practices. The award was presented last fall during the 27th Annual International Irrigation Show in San Antonio, Tex.

Rochester's research on hard-hose travelers prompted traveler manufacturers to adopt speed compensation as a standard feature to provide uniform irrigation application.

Rochester has done extensive volunteer and professional work for the Irrigation Association by serving as an instructor and as a member of the Education Committee and on the Certification Board.

While serving on the faculty at Auburn University, Rochester developed the textbook, "Landscape Irrigation Design." He helped rewrite portions of the IA irrigation reference manual, developed the Glossary of Irrigation Terms, created the first teaching module for the Irrigation Association Education Foundation and contributed to updates of the "Principles of Irrigation" manual and other IA course materials.

Rochester also created the formula sheets for IA certification exams, and he reviewed equations in the upcoming Sixth Edition of Irrigation, known as the bible of the irrigation industry.

Rochester is a registered professional engineer, has a doctorate in biological and agricultural engineering from North Carolina State University and is an IA certified irrigation designer and certified landscape irrigation auditor.

Since 1949, Irrigation Association members have led the advance in water-use efficiency to create smarter solutions for agricultural and landscape irrigation. The IA is comprised of professionals from both public and private sectors—researchers, manufacturers, distributors, dealers, system designers, consultants, contractors, and technicians—all dedicated to efficient and effective water management.

Faculty and Staff News

Several Department of Poultry Science faculty members attended and made presentations at the XIIth European Poultry Congress held last fall in Verona, Italy. The congress, which is held every four years, attracted more than 1,000 participants from 63 countries to the Verona meeting. Members of the AU poultry science department who made presentations included **Wallace Berry, Sarge Bilgili, John Blake, Don Conner, Pat Curtis, Shelly McKee** and **Ed Moran.**

College of Agriculture faculty also figured prominently in the 2006 National Poultry Waste Management Symposium held in October in Arkansas. **John Blake, Ken Macklin** and **Joe Hess** from the poultry science department, along with **Tom McCaskey** from the AU Department of Animal Sciences, participated in this year's program. The AU group presented research and extension information through five posters covering various aspects of poultry waste management. In addition to these scientific presentations, Hess served as the editor for the meeting's proceedings and Blake helped organize the meeting's general session. **Ted Tyson**, from AU's biosystems engineering department, also attended the symposium.

Joe Giambrone, a professor of poultry health in the Department of Poultry Science, recently returned from an 18-day trip to Southeast Asia to work on bird flu.

Harinder Singh Oberoi visited AU's biosystems engineering department in October 2006 as part of the Norman Borlaug International Agricultural Science and Technology Fellowship Program (see story on page 2). While in Auburn, Oberoi studied bioprocessing issues that are involved in the conversion of wastes from agro-processing into bioenergy. His primary work at Auburn was with **Oladiran Fasina,** assistant professor in biosystems engineering; however, he also worked with **Y.Y. Lee** of AU's chemical engineering department and **Mark Liles** in AU's Department of Biological Sciences.

A group of executives from Germany visited Auburn in December to discuss collaborative work on radio frequency identification devices for tracking forest products. These executives met with biosystems engineering department head **Steve Taylor,** faculty **Tim McDonald** and **John Fulton** and engineer **Christian Brodbeck,** along with **Mathew Smidt** of the AU School of Forestry and Wildlife Sciences to outline plans for new research on tracking logs in southern forest production systems. This project is part of the overall "precision forestry" research and extension effort at Auburn.

Taylor, Fulton, McDonald and Brodbeck also participated in the Southeastern Society of American Foresters annual meeting, held in Auburn in September 2006. The theme of the meeting—precision forestry—allowed AU to highlight its work on the newly developing field of precision forestry. Taylor gave the opening address while Fulton and McDonald presented work on the latest GPS system developments, forest land management databases and measuring impacts of forest machines on the soil. Brodbeck coordinated an outdoor exhibit of the latest technology for precision

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Bransby Joins Computer Technology Unit

Mark Bransby

Mark Bransby, a 2000 graduate of Auburn with degrees in accounting and management information systems, has joined the College of Ag/AAES/ACES Computer Technology Unit as an IT specialist. Bransby will support the college and AAES Web presence. He will also coordinate with Web support personnnel for each College of Agriculture department to organize content and create a cohesive college site. In addition, Bransby will work with CTU and the Office of Ag Communications to develop and implement plans for enhancing online resources.

Before coming to work for the college and AAES, Bransby was a business analyst with UDA Technologies in Auburn and had worked previously as a Web designer with the Alabama Cooperative Extension System.

(NEWS, from page 8)

herbicide application and GPS mapping.

Joseph Regenstein, a prestigious food scientist from Cornell University, visited Auburn in December to review progress in AU's research on producing gelatin from alternate feedstocks, such as catfish skins. Regenstein visited with **Yifen Wang,** assistant professor, and **Hongshun Yang,** research fellow, both from biosystems engineering.

In October, Wang was invited to the headquarters of 3M Corporation where he gave two different presentations on his research in food engineering. The presentations were the result of Wang's work on the Board of Food Safety Experts for the 2008 Summer Olympics in Beijing, China. Following Wang's visit to Minnesota, in mid-October, Sophie Wang of 3M's Safety, Security and Protection Services Business Laboratory traveled to Auburn to investigate further possibilities for collaborative research with AU and biosystems engineering.

Biosystems engineering faculty members Fasina, McDonald and **Puneet Srivastava** presented posters on their research into using biomass feedstocks for new energy sources during the Auburn University Alternative Energy Solutions from Alabama's Natural Resources conference held in October. Fasina also presented a poster on his work with solar-heated greenhouses at the Agricultural Energy conference sponsored by the Alabama Department of Economic and Community Affairs.

Norbert Wilson, an assistant professor of agricultural economics and rural sociology, visited Spain in October to consult with leaders of the Generation Challenge Program. The GCP makes grants to researchers at international research laboratories of the Consultative Group for International Agricultural Research to develop research projects to assist resource-limited farmers through plant genomics and breeding research. Wilson, as part of a multidisciplinary team, is helping the GCP develop a system (instrument) for GCP grant recipients to communicate their research findings to researchers and users of their research and products. The instrument is still under development, but will be used in the next round of requests for proposals and will be used to monitor and evaluate current and future funded projects.

Wilson also gave a presentation in October at a forum in Argentina for agricultural trade officials at the Latin America Regional Trade Workshop sponsored by the World Trade Organization, Inter-American Development Bank and the Organization for Economic Development and Cooperation. His talk reviewed non-tariff barriers to trade that affect developing countries.

Student Accomplishments

Lindsay Stevenson, a graduate research assistant in the Department of Poultry Science, was selected to participate in the Youth Program associated with the XIIth European Poultry Congress held last fall in Verona, Italy. She was the lone U.S. representative among the 32 graduate and undergraduate students from across the world who were selected to participate in this program. As a member of this group, Stevenson participated in post-congress tours of food industries, Italian research institutes and a guided visit to Venice. She also presented a paper at the meeting.

AU's soil judging team recently finished second out of 12 teams in the Southeastern Regional Soil Judging Contest hosted by Western Kentucky University. AU Team members include **Mike Gunn, Amy Weaver, Reid McDill, Jaquice Hughes, Hunter Stone** and **Jessica Massey.** The top Auburn individuals were Gunn (second overall out of 81) and Weaver (fifth overall out of 81). The top five teams were: University of Kentucky (2,100 points), Auburn (2,097), Virginia Tech (2,064), Clemson (2,061) and West Virginia (2,046). Auburn qualifies for the national contest to be hosted by Utah State in April.

Elias Bungenstab, a graduate student in the Department of Animal Sciences, was awarded the highly coveted and competitively awarded International Stockmen's Educational Foundation Travel Fellowship to the 2007 International Livestock Congress which was held in Denver, Colo., in January. Travel fellowships were awarded to 25 students representing 21 universities from nine countries, including Argentina, Australia, Brazil, Canada, Japan, New Zealand, Slovakia, Uruguay and the United States. A multi-national selection committee, with half of the 25 recipients representing international students, selected the winners. Fellowships include airfare, ground transportation, hotel and scheduled meals during the International Livestock Congress. Scholastic achievement, leadership experiences and letters of recommendation were all part of the stringent award criteria. The congress provides these students with an opportunity to interact with world industry leaders and contribute to the solutions that will shape the advancement of the livestock industry into the next millennium. Following the trip, Bungenstab wrote a professional paper, which will be published in the event proceedings and on the International Livestock Congress Web site at www.theisef.com.

FLOCKING TOGETHER—Poultry science has a new mascot, an as-yet-unnamed but ever-so-friendly creature who made the rounds at the 2006 Fall Roundup and Taste of Alabama shindig held last October. Pictured, from left, at Roundup with the fine-feathered fellow are College of Ag students Kimberly Triplett, Laura Calhoun, Toni Deason and Rachel Garbarino.

AU SOILS TEAM PLACES SECOND—The Auburn University soil judging team placed second in the southeastern regional competition last fall and will be going on to the national competition in April. Team members include, from left: Jaquice Hughes, Hunter Stone, Mike Gunn, Reid McDill, Amy Weaver, Jessica Massey and team coach agronomy and soils associate professor Joey Shaw.

College of Human Sciences

June Henton, Dean
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CHS Awarded $8 Million Research Grant

The College of Human Sciences has received a grant totaling more than $8.2 million to support the work of the Alabama Community Healthy Marriage Initiative. AU's Center for Children, Youth and Families, which is administrated within CHS, received the five-year grant from the U.S. Department of Health and Human Services Office of Family Assistance.

The initiative will support a variety of educational programs and resources offered throughout the state that encourage healthy relationships and marriages.

"Historically, this is an area that has not been a focus in programs and services for families, yet, we have research-based information that can be offered through educational programs to assist Alabamians build and sustain healthy relationships and marriages," says **Francesca Adler-Baeder,** associate professor in CHS' Department of Human Development and Family Studies, Extension specialist and principal investigator for the project.

The funds will allow AU researchers, working in partnership with the Alabama Department of Child Abuse and Neglect Prevention and an established network of other state and community entities, to continue to provide access to marriage education programs for Alabama's citizens.

U.S. Senator Richard C. Shelby, a member of the Senate Appropriations Committee, announced in October the release of an initial $1.6 million for the project.

Myers Appointed Development Director for CHS

Kristy Myers has been appointed director of development for the College of Human Sciences. Prior to joining the CHS staff, Myers was a pharmaceutical sales representative and director of development for the AU College of Sciences and Mathematics.

Susan Hubbard receives award from Bob Donlan, chair-elect of the Alabama Hospitality and Restaurant Association.

CHS's Hotel and Restaurant Management Program Honored

The Alabama Restaurant Association and the Alabama Hospitality Association recently hosted the seventh annual Restaurant and Hospitality Stars of Alabama awards banquet in Montgomery and the College of Human Sciences took top honors in two categories.

Susan Hubbard, CHS associate dean for academic affairs and former coordinator of CHS's Hotel and Restaurant Management Program, was named Hospitality Educator of the Year. **Hans van der Reijden,** general manager of The Hotel at Auburn University and Dixon Conference Center, was named Hotelier of the Year.

College of Sciences and Mathematics

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Freeman Herbarium Playing Key Role in Global Biological Information Database

The John D. Freeman Herbarium in the AU College of Sciences and Mathematics will play a key role in the National Science Foundation's Southeast Regional Network of Expertise and Collections project. The project is a collaboration among major herbaria in the Southeast to facilitate an ongoing effort to database all plant collection information from regional herbaria to be made available online for use by students and scientists.

"As the official state herbarium, we hold a diverse and important plant collection that is significantly focused on Alabama and the southeastern United States, a biologically unique eco-region in North America," says **Leslie Goertzen,** director of the Freeman Herbarium and assistant professor in COSAM's Department of Biological Sciences. "We are very excited to be a part of this project and to represent Auburn University."

The five-year, $498,000 project is part of a global effort to make biological information readily available for students, teachers and researchers. Scientists can use the information in the database to understand plant distribution throughout the earth, and to help identify areas that need to be conserved. Label data from more than 62,000 herbarium sheets at the Freeman Herbarium have been entered into the database.

"We have put a lot of effort into staying on the cutting edge of herbarium management practices which now include imaging and databasing the information for all our specimens. With increasingly sophisticated software tools, we can quickly and easily extract biodiversity information for a wide range of research applications," says **Curtis Hansen,** curator of the Freeman Herbarium. "We have had our main vascular plant collection databased since 2003 and are well situated to be a major contributor to this project."

Appalachian State professor Zack Murrell will direct the project. "There is a lack of understanding of the value of plants to society and the many careers in botany, from conservation biology to molecular biology," he says. Murrell believes this has resulted in a decrease in the number of students pursuing a career in botany, while there is an increasing demand for botanists. The goal in creating this network is to increase awareness of plants and their impact on our daily lives.

The Freeman Herbarium at Auburn University is the largest herbarium in Alabama, housing more than 70,000 specimens of vascular and nonvascular plants that are critical to understanding the flora of the state and the distribution of plants across the Southeast.

Alabama Math, Science and Technology Initiative Opens New AU Site

Schools in east Alabama will join the growing number of schools across the state that benefit from the Alabama Math, Science and Technology Initiative.

Alabama Superintendent of Education Joe Morton, along with Auburn University President **Ed Richardson,** recently announced the new state appropriation of $831,000 for the first year to fund the expansion of AMSTI serving eligible schools in east Alabama through the newly established site at Auburn University.

AMSTI is the Alabama Department of Education's initiative designed to improve math and science teaching and learning statewide, and provides professional development, equipment and materials, and on-site support to K-12 public school teachers and administrators.

"Auburn University welcomes the opportunity to participate in the AMSTI program," says Richardson. "I commend Dr. Morton and the State School Board for expanding this research-based program that has shown measurable results. Improved skills in mathematics, science and technology are critical to Alabama's economic growth and will lead to continued improvements in college and university academic programs."

Currently, more than 111,000 students and approximately 200 public schools are served by AMSTI statewide. Through the partnership of the College of Sciences and Mathematics and the College of Education, the Auburn University site, led by Marllin Simon of the COSAM physics department and Gary Martin in the AU education college's Department of Curriculum and Development, will potentially serve an additional 13 schools in east Alabama in the first year. A community awareness session was held in October 2006 at Drake Middle School in Auburn.

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"AMSTI-AU is a logical continuation of efforts to improve mathematics and science education in east Alabama, and will build on the partnership formed by the TEAM-Math and TEAM-Science projects," says Martin. "These efforts are essential in producing students prepared for further study and for a workforce which increasingly requires the ability to use and apply mathematics and science."

COSAM Associate Dean for Research **Marie Wooten** explains, "AMSTI builds upon the long-term collaborative efforts between faculty in the College of Sciences and Mathematics and the College of Education. Our efforts are represented by a portfolio of programs that have received funding from various state and federal sources. Our goals are to improve content delivery, enhance the curriculum, and professional development of teachers in both the sciences and mathematics in our public schools. These efforts will drive student success and interest in pursuit of careers in these and related areas."

For more information, visit www.amsti.org.

College of Veterinary Medicine

Tim Boosinger, Dean
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Veterinary Professor Develops First Egg-injected Avian Influenza Poultry Vaccination

Dr. Haroldo Toro

Dr. Haroldo Toro of the College of Veterinary Medicine, in collaboration with Vaxin Inc. of Birmingham, has developed the first "in ovo," or egg-injected, vaccine to protect chickens against avian influenza. Toro, whose research is in press in the scientific journal, Vaccine, says it would provide 100 percent protection once an outbreak's strain is determined.

"We have proven the principle, which is the major step in leading to commercially produced vaccine that could be vital to the poultry industry," Toro says. "When an outbreak occurs, we would determine the strain and quickly create a vaccine within three months specifically for it."

His research is funded through a USDA program set up in 2004 for universities to study avian influenza. The next step is gaining federal approval to commercially produce the vaccine.

"We are looking at two or three years for federal approval, but it might be much sooner if an outbreak occurs," he says. "We have a very good tool against avian flu. No one has done this before."

AU Retires Golden Eagle Tiger

War Eagle VI: Tiger
photo by Jeff Etheridge

Auburn University officials retired the school's famed 26-year-old golden eagle Tiger during the Nov. 11, 2006, football game against the University of Georgia. "Tiger has been, and will continue to be, a much-treasured part of Auburn University history," says AU President Ed Richardson. "She will still make guest appearances at games and will remain a vital part of the educational programs of the Southeastern Raptor Center."

Serving as War Eagle VI, Tiger has represented the university's school spirit since 1986 and has been flying before home football games since 2000. In 2002 she flew during the opening ceremonies of the Winter Olympics in Salt Lake City, with her flight being seen by millions of television viewers around the world.

University officials at halftime during the game presented six-year-old golden eagle Nova as the next official Auburn eagle, War Eagle VII. Nova and 11-year-old bald eagle Spirit have been making pre-game flights for three and five years, respectively.

All birds used in Auburn's educational programs are non-releasable due to prior injuries or human imprinting. Any bird capable of surviving in the wild must be released, according to the U.S. Fish and Wildlife Service, which permits Auburn to house the birds.

CVM Receives $1.4 Million Grant to Study Lymphoma

Dr. Bruce Smith of the College of Veterinary Medicine has been awarded a research grant by the National Cancer Institute of the National Institutes of Health. The grant, titled "Targeted Gene Therapy for Lymphoma," will provide $1.4 million in support over five years. Smith and his co-investigators will use the funding to develop new treatments for canine lymphoma using gene therapy vectors targeted to canine lymphoma cells.

School of Forestry and Wildlife Sciences

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Hepp Awarded NSF Grant

Dr. Gary Hepp

Gary Hepp, a professor in the AU School of Forestry and Wildlife Sciences, was awarded a $722,000 four-year grant by the National Science Foundation that may ultimately help replenish the numbers of ducks in America's wetlands.

"Our overall goals are to examine the importance of incubation temperature during early development and to provide a better understanding of how reproductive trade-offs made by females influence their fitness," says Hepp. He is conducting the study at the Department of Energy's Savannah River site in South Carolina with a researcher from Virginia Tech University and with graduate and undergraduate research assistants.

AU's Office of Research helped launch the incubation project in 2003 with a $3,000 grant through the university's Competitive Research Grant Program. "That grant enabled me to conduct the first phase of the study," says Hepp.

Wood ducks, such as this male duck, are the focus of Hepp's study.

Study to Determine Changes' Impacts on Southeastern U.S. Ecosystems

A research team within the School of Forestry and Wildlife Sciences has received a $375,000 grant from the U.S. Department of Energy to study how changes in climate, atmospheric composition and land use are impacting southeastern U.S. ecosystems.

In the three-year study, the SFWS group—led by **Hanqin Tian** and including **Arthur Chappelka, Ge Sun, Hua Chen** and **Shufen Pan**—will use ecosystem modeling, satellite observations, field studies and Forest Inventory Analysis data to investigate how natural and human pressures have altered ecosystem function, structure and services in the region.

Chen Wins Poster Award

Guangsheng Chen, a Ph.D. student in forestry working under the direction of School of Forestry and Wildlife Sciences professor Hanqin Tian, was awarded first place and $100 for the outstanding student poster at the Southeastern Society of American Foresters meeting in September.

News from the AAES and other Alabama land-grant-related entities.

Lotus:
A New Crop for Alabama?

By Jamie Creamer

Lotus have fragrant flowers that bloom from mid-June through the early fall and distinctive seedpods that, when dried, are often used in flower arrangements.

An ancient aquatic plant that other countries for centuries have used for food, medicine and ornamental value could become all that and more for Alabama as a result of a research project Alabama Agricultural Experiment Station scientists have launched.

The plant is the lotus, and in collaboration with scientists from China, Japan, Mississippi and Georgia, the Auburn research team is evaluating 130 varieties from around the world to determine their ornamental characteristics, such as flower color, size and longevity, and, among the edible cultivars, how appealing they might be to the American palate.

But their study of the perennial water plant isn't stopping there. They also intend to investigate the potential demand for lotus products in Alabama and the Southeast, analyze lotus production costs and economic potential and expand their current extensive collection of lotus cultivars—all in an effort to make Alabama, and specifically the state's Black Belt, the nation's center for lotus production.

Identification of aquaculture species that have potential for production in west Alabama in order to bolster the economy of the state's poorest regions is a priority under a state-funded Black Belt aquaculture research initiative that the AAES and the Alabama Cooperative Extension System began last year.

"We believe lotus is such a crop, because it could be an ideal crop for the poorly drained soils of the Black Belt and it likely can be produced inexpensively, either along with catfish or alone as a new aquaculture crop on a part-time basis," AU horticulture professor and lotus research team leader Ken Tilt says.

"With its uniqueness to reach both the ornamental market and the food market, lotus has the potential to become the Vidalia onion of the Black Belt," he says. "It is not so much a new discovery as it is introducing and promoting in the U.S. what a few billion people around the world enjoy on a regular basis. We want to show people here what they have been missing."

Native to southern Asia and sacred to Hindus and Buddhists, lotus have large leaves between four and 18 inches or more in diameter, fragrant flowers that bloom from mid-June through the early fall and distinctive seedpods which, when dried, are often used in flower arrangements.

Depending on the cultivars, lotus can vary greatly in size, from dainty one-gallon-container varieties that stand a mere six inches above the water to ones that tower six feet above the surface in the shallow areas of ponds where they are planted. Cultures for centuries have used the plant for medicinal purposes to treat a myriad of conditions that include diarrhea, high blood pressure, insomnia and skin ailments. Virtually all parts of lotus—from the seeds to the rhizomes, or underground stems—are edible.

The AU lotus project took root six years ago, when Tilt and fellow AU horticulture professor Jeff Sibley traveled to Hubei, China, and visited Wuhan Botanical Gardens and its director, AU alumnus Hongwen Huang. That 175-acre garden, home to nearly 4,000 species of plants, is China's chief research center for lotus production.

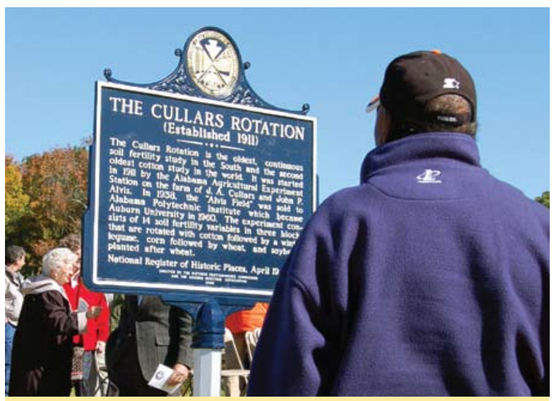
The visit piqued the Auburn faculty members' interest in the plant, and they began collecting cultivars from China, Japan, New Zealand and Australia to bring to Alabama to evaluate for their growth potential here. Currently, the testing—with outstanding results—is being done on the Auburn campus and at the AAES's North Alabama Horticultural Research Center in Cullman, but that will be expanded to the Black Belt Research and Extension Center in Marion Junction before year's end, Tilt says.

If lotus shows significant economic potential, the research team will seek to have the U.S. Department of Agriculture establish the Black Belt as the nation's lotus germplasm repository. That means it would be the center for the collection, evaluation and distribution of lotus cultivars from around the world.

"We already have one of the largest collections of lotus cultivars in the country, so it makes sense to have the lotus gene bank in Alabama," Tilt says.

Working with Tilt and Sibley on the lotus project are AU horticulture professor Floyd Woods, agricultural economics professor Deacue Fields and graduate students Daike Tian, Warner Orozco and Wayne Chesnut; scientists from the University of Georgia and Mississippi State University; and researchers in China and Japan.

"We're very optimistic that lotus will soon be gracing Alabamians' gardens and dinner tables and that Black Belt farmers will be reaping the rewards," Tilt says.



HISTORIC RESEARCH SITE—A federal marker designating a four-acre AAES research field on the AU campus as a site on the National Register of Historic Places was unveiled in ceremonies recently. Established in 1911 on land owned and farmed by J.A. Cullars and John P. Alvis, the Cullars Rotation is the oldest continuous soil fertility study in the South, one of the nation's oldest continuous field crop experiments and the second oldest cotton production experiment in the world. The four-acre Cullars Rotation, located immediately behind the Jule Collins Smith Museum of Fine Art, provides important information on the long-term effects of fertilization on sustainable crop production in sandy, Coastal Plain soils.

Research Briefs

Another Strike Against Nicotine

A study that will shed light on nicotine's role in the development of such conditions as heart disease and diabetes is under way at Auburn University.

Specifically, AAES scientist **Robert Judd,** associate professor of pharmacology in the College of Veterinary Medicine and head of AU's diabetes research program, is investigating how nicotine in the bloodstream affects the body's level of the hormone adiponectin.

Adiponectin, which is produced and secreted by fat cells, regulates the body's response to insulin. It also has anti-inflammatory properties that are associated with a reduced risk of heart disease.

Judd says researchers already know that nicotine inhibits the secretion of adiponectin. His project will determine the mechanisms that make that happen. That could lead to better methods of preventing and alternative methods of treating diabetes and heart disease.

A Key to the Diabetes, Obesity Riddle

Research by AU nutrition scientist **Suresh Mathews** has solved a medical riddle that could lead to better health and longer lives for millions of people suffering from or at risk of developing diabetes, obesity or both.

The AAES researcher has found that fetuin, a blood protein secreted by the liver, may play a significant role in the regulation of glucose disposal, insulin sensitivity, weight gain and fat accumulation in the body.

Insulin is a hormone that the body needs to convert sugar and starches into energy for daily life. With diabetes, the body either does not produce or doesn't properly use insulin.

In research with mice, Mathews has found that, once fetuin enters the bloodstream, it blocks the effects of insulin. Increased fetuin levels are associated with insulin resistance, the hallmark of obesity and type 2 diabetes.

The goal of Mathews' research now is to determine the mechanisms involved in turning off fetuin and how blocking the protein works to improve the body's insulin sensitivity, increase glucose utilization and prevent weight gain.

That could lead to development of a treatment for diabetes and obesity.

Honing in on Hardier Cotton

The search for cotton plants that can ward off root-eating nematodes and can tolerate extreme heat and drought has entered a new phase at AU.

After several growing seasons of evaluating almost 2,000 different varieties of cotton plants from around the globe, AAES plant breeder **David Weaver** has identified seven varieties found in Mexico, Brazil and Guadeloupe that show at least some natural resistance to costly reniform nematodes, and even more varieties that are significantly more tolerant of heat and drought than the cotton varieties adapted to grow in the U.S.

Because these exotic varieties aren't adapted to grow here, Weaver is looking for the genes responsible for nematode resistance and heat tolerance. Once he's pinpointed those genes, the next step will be to transfer them into adapted cotton varieties.

Like all basic-research projects, this one won't come to fruition overnight. Weaver predicts it will be at least 10 years before these new-and-improved cotton varieties are growing in U.S. farmers' fields.

The economic impact of the new varieties should be dramatic. Reniform nematodes cause millions of dollars in damage each year, and excessively hot, dry years cut yields by an average of 40 percent.

Turning Yard Waste into Power: A Brilliant Idea

Most folks look at grass clippings, leaves, tree limbs and shrubbery trimmings as nothing more than yard waste. **Ed Loewenstein** sees it as a wasted resource, and he and a team of other AAES researchers have launched a study to determine whether it would be feasible, economically and otherwise, for cities to build their own power plants and generate electricity using that material as fuel.

With the city of Auburn as its subject in the three-year study, the scientists will quantify the type and amount of yard waste residents produce by season of the year. Then, using that data along with economic data they compile and landscape data they collect with remote-sensing technology, they will develop a model that any city could use to quickly evaluate the possibility of getting into the biomass-fueled power-generating business.

Cities already pay to collect yard waste and either compost it or send it to a landfill. Using it as biomass, cities would incur no additional costs, would extend the useful life cycle of landfills and would, in essence, have "free fuel" for power plants.

Cattle—When Smaller Might Be Better

When it comes to beef cattle, is bigger necessarily better?

In a research project under way at the Tennessee Valley Research and Extension Center in Belle Mina, AAES animal scientist **Daryl Kuhlers** is looking to answer that question.

Specifically, he is investigating whether smaller-framed cows—animals that mature at about 1,100 pounds as opposed to the 1,200-1,400 pounds typical of cows today—use feed more efficiently and, subsequently, can be more profitable than their larger counterparts.

He currently is breeding a line of smaller cattle for the study, in which he and fellow researchers will also evaluate and compare the quality of the meat from the two groups.

One goal is to develop a cow that could be raised to market size without needing supplemental feed.

Natural Heritage Program Comes to Auburn

The Alabama Natural Heritage Program recently became a subprogram under the Auburn University Environmental Institute. The ALNHP was begun in January 1989 to identify significant natural "elements" (rare and endangered species and communities of species) and to help establish conservation priorities in Alabama. Natural heritage programs or conservation data centers are established in all 50 states, Canada, Latin America and the Caribbean.

Until recently, the ALNHP was administered under the Nature Conservancy. Its move to Auburn University builds on the existing collaborations between ALNHP staff and academic researchers throughout Alabama. For more information about the ALNHP, visit their Web site at www.alnhp.org.

Currently the ALNHP staff is working with **Craig Guyer** in AU's Department of Biological Sciences and **Kathrine Flynn** in AU's School of Forestry and Wildlife Sciences.

Tony Dawkins Wins ALFA Award

Tony Dawkins, superintendent of the Sand Mountain Research and Extension Center in Crossville, recently was awarded an Alabama Farmers Federation leadership award.

The award recognizes individuals who have been instrumental in establishing a specialized program at the county level. These individuals were nominated by their county federation president for this special recognition.

Dawkins was nominated by DeKalb County President Waymon Buttram. According to Jerry Newby, president of the federation, "Tony serves as superintendent of the Sand Mountain Research and Extension Center in Crossville. Tony is responsible on a daily basis for coordinating, conducting and/or assisting with meetings, field days or tours that benefit agriculture and rural Alabama. Just a few examples from a long list are: Master Cattlemen's Class, FFA Speaking Contest, Sand Mountain Beekeepers, Ag Exploration Day, Broiler Litter Field Day, Master Gardener courses, Invasive Species/Forestry Meeting and farm pond management."

News from the College of Agriculture's Student Services program. For more information on these stories or on educational opportunities in the College, contact Don Mulvaney, coordinator of leadership and student development, or Bill Hardy, associate dean, at 334-844-2345 or visit www.ag.auburn.edu/.

Quadrathalon Winners Named

Six teams of AU students competed last fall in the 2006 Academic Quadrathalon, sponsored by the AU Department of Animal Sciences, for a chance to represent Auburn in the Southern Section meetings held in February 2007 in Auburn and Mobile.

To win, quadrathalon participants complete a laboratory practicum, an oral presentation, a written exam and a quiz bowl on a variety of subjects related to animal science including microbiology, companion animals, swine, dairy, small ruminants, equine, beef, meats, nutrition and reproduction. The teams were scored on their performances in each category, and an overall team winner was announced at the end of the event.

First place went to a team including animal sciences majors **David Daniel, Chris Britton** and **Katie McMurtrie** along with poultry science major **Toni Deason.** Second place went to the team including animal science majors **Jena Smith** and **Hope Burge,** agricultural communications major **Kaitlin Mulvaney** and poultry science major **Clint Shumate.** The third-place team included animal sciences majors **Callie Nunley, Amanda Dariani** and **Zane Troxtel** and education major **Sherrell Decastra.**

The first-place team won the laboratory and written sections of the quadrathalon and tied for first place in the oral presentation category. It also won the microbiology, swine, dairy and reproduction sections.

Other students in the competition included: **John Starnes, Robert Hardy, Kevin Bower, Jody Grace, Jeri Caldwell, Cody Horton, Jordan Towns, Kinda Wood, Amy Forsyth, Ashley Booth, Jeremy Deaton** and **Andy Griffin.**

The quadrathalon focuses on subjects studied by undergraduate students and provides them experiences with problem solving, teamwork and cooperation with faculty.

Several animal sciences faculty and staff members assisted in the contest including **Tom McCaskey, Keith Cummins, Frank Owsley, Boyd Brady, Darrell Rankins, Diego Gimenez, Barney Wilborn, Lee Chiba, Dale Coleman, Steve Schmidt, Daryl Kuhlers, Bob Ebert, Wayne Greene** and **Lisa Kriese-Anderson,** who did much of the contest organizing.

The winners were given plaques and leather coasters prepared by Larry Montgomery, owner of Montgomery Awards and Gifts.

QUADRATHELETES—Hands-on interaction (upper photo) was just part of the test for students who competed in 2006 academic animal sciences quadrathalon. The winning team (lower photo), which competed in the regional contest in February, included, from left, Katie McMurtrie, David Daniel, Toni Deason and Chris Britton. Pictured with the team is Lisa Kriese-Anderson (right), Extension specialist and professor of animal sciences who helped organize the quadrathalon.

College/AAES Research, Teaching Awards Presented—Three College of Agriculture faculty members recently won awards for their academic and scientific prowess. **James Brown,** a professor in the Department of Horticulture, was given the Dean's Award for Teaching Excellence. Alabama Agricultural Experiment Station Director's Research Awards were given to **John Fulton,** an assistant professor in biosystems engineering who won as the junior researcher, and **John Liu,** an alumni professor in the Department of Fisheries and Allied Aquacultures who was named the senior researcher winner. The awards, which include cash prizes, are given annually by the College of Ag dean and AAES director.

College/AAES Staff Awards Presented—Several members of the College of Agriculture and Alabama Agricultural Experiment Sta-tion staff were recognized recently for their contributions to the organizations. Winners in the Outstanding Technical Staff category were **John L. Jones** from the Department of Poultry Science and **Billy Segrest Jr.** from the E.V. Smith Research Center. Outstanding Administrative Staff winners were **Linda Newton** of the Department of Biosystems Engineering and **Kathy Strickland** of the E.V. Smith Research Center. Outstanding A/P Technical Staff winners were **William Bryce** and **Susan Sladden,** both from the Department of Agronomy and Soils. And the winners of the Outstanding A/P Administrative awards were **Randy Akridge** of the Brewton and Monroeville Agricultural Research Units, **Jamie Creamer** of the Office of Ag Communications and **Bernice Fischman** in the Department of Horticulture. Each winner received a plaque and a cash award.

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College of Agriculture Dean Richard Guthrie, left, and Kyle Creamer, College graduation marshal for AU's December 2006 commencement ceremonies, prepare to enter Beard-Eaves Memorial Coliseum.

Creamer, Smith Win Fall Student Awards

By Bill Hardy
Associate Dean

Kyle Creamer and **Jena Smith,** both fall 2006 College of Agriculture graduates, received prestigious awards for their academic accomplishments in 2006.

Creamer, who graduated summa cum laude with his bachelor's degree in horticulture, was recognized for his exceptional contributions to the College of Agriculture and Auburn University through receipt of two recognitions at graduation. He was given the Dean's Award for Academic and Professional Excellence, and he represented the college as the graduation marshal at the AU commencement program in December 2006.

In addition to serving the college as an active Ag Ambassador, Creamer was a member of Associated Landscape Contractors of America and the Auburn Christian Student Center. He was inducted into Phi Kappa Phi, the university's highest all-discipline honorary, and into Gamma Sigma Delta–the Honor Society of Agriculture. During his collegiate career, he participated in two study-abroad experiences—a study tour of Holland's horticulture and a six-week study at Myerscough College in England.

Creamer is working now as a sales representative in the horticultural area for Harrell's Fertilizers, Inc., covering the central and southeastern U.S.

Smith, who graduated cum laude with a degree in animal sciences, was honored through her receipt of the Dean's Award for Academic and Professional Excellence in recognition of her outstanding academic accomplishments and contributions to her curriculum and the college.

In addition to being an exceptional Ag Ambassador (where she served as Treasurer), she was a member of Alpha Zeta and Block and Bridle. In Block and Bridle, she served in several leadership positions—reporter, marshall and second vice president. During her collegiate career, Jena was inducted into several academic honorary organizations—Alpha Lambda Delta, Phi Eta Sigma, Phi Kappa Phi and Gamma Sigma Delta. She was also recognized by receiving the Gamma Sigma Delta Freshman Merit Award. She was recently named to Who's Who Among American Colleges and Universities.

Smith is now working on her master's degree in education here at Auburn. After completion of that degree, she plans to teach at the high-school level.

Dean's List Fall Semester

A total of 69 (7.7 percent) College of Agriculture students achieved Dean's List recognition (a grade point average of at least 3.7 with a minimum of 14 credit hours) during the 2006 fall semester. Thirty-three of these had a perfect 4.0 grade point average.

Those who made the Dean's List are:

Ag Communications
Sarah Adams
Rebecca Bearden
Jessica Chesnut
Devin Dotson
Emily Tice

Ag Economics
Tara Bradford
Cynda Brantly
John Lee
Tyson Raper
Bart Smith
Blaire Wood

Agronomy
Whitney Boozer
Mark Doroh
Ben Griffiths
Kyle Johnson
Brad Kirkland
Joshua Martin

Animal Sciences
Shelby Agnew
Cheryl Auch
Laura Bagents
Laura Calhoun
Melissa Carson
Christi Chesnut
Kimberly Cline
Adam Cooner
Jeremy Deaton
Nick De Pompa
Olivia Glover
Sarah Graham
Darbi Helton
Kristin Holland
Ashley Jones
Megan Kendrick
Adam Kessler
Sarah Merck
Lauren Muse
Amy Patterson
Julie Price
Rebecca Rifkin
Elizabeth Scholl
Megan Simpson
Will Terry
Jordan Towns
Jill Ward
Michael Williams
Marla Yocco

Horticulture
Christopher Bagents
Laureanne Bond
Delaine Borden
Loreal Brooks
Brandy Brown
Veronica Caswell
Kyle Creamer
Elizabeth Farris
Whitney Griffin
Will Hargrove
Bethany Heck
Kathryne Jernigan
Megan Leach
Chris Marble
Anna-Marie Murphy
Adam Sleeper
Katie Werneth

Poultry Science
Tiffany Cable
Rachel Garbarino
Jessica Chesnut
Josiah Roberts
Sam Rochell
Jeremy Thompson
Zane Thompson

FUN AT AG ROUNDUP—Eric Wang tries his hand at shelling corn the old-fashioned way during the AU College of Agriculture and Agricultural Alumni Association's 27th annual Fall Roundup and Taste of Alabama Agriculture last fall at Ag Heritage Park. During the roundup, held each fall on Homecoming Saturday, visitors can sample a plethora of Alabama's finest agricultural products—from catfish and burgers to peanuts and collards—and check out a number of informational and educational exhibits as well. The 2006 roundup was a record-setter in attendance, bringing thousands of game-goers to the park for what's billed as AU's largest tailgate party. Eric is the son of AU biosystems engineering assistant professor Yifen Wang.

In a City Where Jones Name is Legend, AU Alum Strengthens Family Legacy

By Jamie Creamer

Ray Jones takes a break from checking cattle at G.W. Jones & Sons Farm in Huntsville, the largest urban farm in the U.S.

Brothers Carl and Edwin Jones were both University of Alabama engineering graduates. Heck, back in his day, Edwin had even suited up and played football for the Crimson Tide.

But in 1953, as they considered the future of their north Alabama cattle operation, they decided somebody in the family needed a degree in agriculture. So they put their Tide pride aside and sent Carl's son, 18-year-old Ray, to Auburn.

Not that Ray didn't have a say in the matter.

"I was an Alabama fan, but I was the happiest one with the decision because I wanted to study agriculture," Ray says. "All I wanted to do was farm."

And farming by and large is what he did for 10 years after earning his animal husbandry degree from Alabama Polytechnic Institute in 1957. He managed G.W. Jones & Sons Farms in rural Madison, Jackson and Marshall counties, and under his oversight, the operation flourished.

But Ray's whole world changed in October 1967, and he found himself with sole responsibility not only for the farm but for the family's 80-year-old engineering business as well.

To get to that point in the story, though, you need a brief recap of the G.W. Jones family history, picking up in 1886. That was the year that G.W.—Ray's grandfather—started G.W. Jones Civil Engineering in Huntsville. Five male offspring later, G.W. added "& Sons" to the name of the company whose bread and butter was land surveying and abstract work.

In 1939, with business sluggish for the firm in the aftermath of the depression, sons Carl and Edwin bought a run-down, 2,500-acre farm south of Huntsville, hoping to have a supplemental source of income for the then-struggling engineering firm. Carl was primarily involved in the engineering side of the business and an offshoot real estate venture, all headquartered in the company's office in downtown Huntsville, while Edwin managed the farm.

In Ray's junior year at Auburn, Edwin died suddenly. So it was that after Ray graduated from API and served a year of active duty in the National Guard, Carl brought him into the family partnership and turned the primary responsibility of the farm over to him.

Over the next few years, with Carl's input, Ray steadily expanded the herd and the farm, spearheading the acquisition of two large existing farms, one in Jackson County and the other in Marshall. Ray did do some engineering work on the side, mostly in the winter months, and most of it surveying boundary lines, "but farming was what I loved best," he says.

Then came Saturday, Oct. 7, 1967. Carl—a highly regarded mover and shaker in the rapidly growing city of Huntsville—went to the Alabama–Ole Miss football game. In the stands, during the game, the man some called "Mr. Huntsville" suffered a heart attack and died.

"I was listening to the game on the radio, and I heard the sirens," Ray recalls. "Ten minutes later, I got a call that he (Carl) was gone."

Carl's death at the age of 58 left the city reeling, the company in a nightmarish limbo and Ray in deep shock, grief and insecurity.

"Most of his emphasis had been (with the engineering office) in town, so I did what I had to do: I redirected my focus," Ray says. "There were people working in that office who'd been with the firm their whole careers. It would have been highly unfair to them for me to just throw in the towel. I knew I at least had to swing at the ball."

As time passed, Ray and company not only survived; they thrived.

"And I finally got to where I actually even enjoyed engineering," says Ray, who over the years took civil engineering courses at the University of Alabama at Huntsville and earned a license in land surveying.

Ray has put together an impressive resume that includes a business biography, which outlines some 40 years of activity in the fields of engineering, real estate and investments, and an agricultural biography, covering from childhood to the present.

Included in that latter are numerous awards and honors, the crown jewel of which came in 1996 when Ray was named the Sunbelt Expo's Southeastern Farmer of the Year. He was then and continues to be the only Alabama farmer ever to win the prestigious award.

Ray still remembers vividly the day he won that honor.

"I was watching the fellow (nominee) from Florida to get his reaction, because I was that sure he was going to win," Ray recalls. "When they called my name, I was stunned."

He shouldn't have been. The Jones family farm has long been known for its productivity, its environmental consciousness, its innovative management and its successful marketing strategies. In addition, the homeplace farm—which, when purchased in '39, was a good four miles from downtown Huntsville—now holds the distinction of being the largest urban farm in the U.S. It's sandwiched between retail stores and residential developments, and tens of thousands of cars drive through the middle of the farm every day.

Some of those vehicles may have the farm as their destination. According to Ray, G.W. Jones & Sons Farm hosts about 1,200 visitors a year—in groups ranging from kindergarteners to veteran cattle producers.

"We love giving tours," Ray says. "We're glad to share what we have."

Ray and Libby, his wife of 46 years, have three children, and it is to them and their spouses that Ray has passed the torch in both the engineering and farming enterprises.

At G.W. Jones & Sons Consulting Engineers Inc., Ray remains as chief executive officer, but the president is Mark Yokley, AU civil engineering alum and husband of Ray and Libby's daughter Lisa (herself an AU civil engineering graduate). Daughter May's husband, Mike Patterson, is the firm's chief financial officer.

On the farming side, Raymond B. Jones Jr., who graduated from David Lipscomb University in Nashville in 1993 with a degree in business but who then attended Auburn for beef cattle production classes, manages the 700-

(continued on page 17)

(JONES, from page 16)

cow operation. He also heads up the commercial and residential projects of Raymond B. Jones & Associates Inc., a real estate development company.

"I haven't retired, nor do I plan to," Ray says. "I can't imagine that it would be much fun to retire."

He has plenty besides work to keep him swamped. He's highly active in mission work with the Mayfair Church of Christ, located on 25 acres of what used to be Jones Farm pastureland, and he serves on the Lipscomb University Board of Trustees and is chairman of the University of Alabama Huntsville Foundation Board.

He also is a past member of the AU National Alumni Board, and it is to AU that he holds a special allegiance.

As he says, "Auburn gave me a good, rounded education—it must have, or I wouldn't have been able to jump from farming into all these other businesses through the years."

AU Ag Alumni Award Winners Announced

Five outstanding individuals with ties to Alabama agriculture were honored in February during the AU Agricultural Alumni Association's 2007 Annual Meeting and Hall of Honor Banquet.

This year's inductees into the Hall of Honor, which pays tribute to living Alabamians for their contributions to Alabama agriculture, are James T. Pursell of Sylacauga, Dale L. Huffman of Auburn, and James E. Brady Jr. of Marion. The late Thomas F. Burnside Jr. of Wedowee and Hanchey E. Logue Sr., who lived in Auburn, were added to the list of Pioneer Award winners, who are honored posthumously for their contributions to the state's agriculture.

NEW RED BARN—For generations of Auburn students, residents and visitors, the Old Red Barn was an Auburn University landmark and an icon of Auburn agriculture. Built in 1929 on a hill off Samford Avenue (in the heart of Ag Heritage Park), the Old Red Barn was used for a wide range of academic, outreach and research activities during its 75-year life span. In recent years, the barn had deteriorated beyond repair. Thanks to a $500,000 donation from the family of AU Trustee Bobby Lowder, however, a replica was constructed that preserves the style, grace and landmark status of the original barn. The new red barn (pictured upper right), which was officially opened during a special ceremony held last fall, is now used for College of Agriculture and community events. It also houses an antique farm equipment display featuring agricultural artifacts and implements donated by the James W. (Bill) Johnson, E.T. York and George "Jack" Clegg families. Pictured at right were three of the many dignitaries on hand for the grand opening: (from left) AU President Ed Richardson and AU Board of Trustee members John Blackwell and Bobby Lowder.

Megan's Homemade King Cake

Megan Finnigan

Megan Finnigan, one of our favorite College of Ag students and a dedicated Dean's office employee, grew up in Satsuma, a small town just outside of Mobile, and was reared on the Mobile Mardi Gras celebration. As Megan notes, Mardi Gras actually originated in Mobile rather than in New Orleans, so she has roots to the oldest line of the tradition. And one of the tasty parts of that tradition is the King Cake.

King Cakes are rich Danish-like cakes decorated with sugar in Mardi Gras colors—purple representing justice, green representing faith and gold representing power. For generations, the tradition was to bake objects such as coins, beans, pecans and even precious jewels into the King Cake. These days, the most common item found in the King Cake is a small plastic baby representing the infant Jesus. The custom is for each person at a Mardi Gras party to take a piece of cake. The one whose slice contains the baby is "crowned" king or queen for the day, gets a year of good luck AND is obligated to host the following year's party and supply the King Cake.

Megan and her mother developed their own easy version of a King Cake and shared it with the College of Ag staff last year. This year we asked her to share the recipe with our readers.

1 can pop-n-bake cinnamon rolls
1/3 cup butter, melted
1 cup powdered sugar
2/3 teaspoon vanilla extract
Yellow, green and purple food coloring
1/2 cup granulated sugar
1 quarter-size plastic baby

Unravel the cinnamon rolls and pinch together strips to form three long strips. Braid the three strips and arrange the rope in a complete circle on a baking pan. Bake according to the cinnamon roll package directions. Once it is baked, insert the baby Jesus into the cake. Meanwhile, melt the butter and mix it with powdered sugar and vanilla in a medium bowl. Drizzle the resulting glaze all over the cake. In three small bowls, equally divide the granulated sugar. Add one food coloring to each bowl to tint the sugar. Sprinkle the colored sugar on the glazed cake. Then slice, eat and hope your piece contains the baby Jesus!

calendar of events

TEDDY BEAR CARE—Teddy bear repair is one of many fun events and demonstrations offered during the College of Veterinary Medicine's Open House on April 21.

FLOWER POWER—Flowers, fruits, vegetables, arts, music and much more will be offered during the 2007 season kick-off of The Market at Ag Heritage Park on April 19.

MAKING MASKS— At the Ag in the Classroom Summer Institute to be held June 18-20, teachers from across Alabama will participate in activities they can take back to their classrooms.

GOLFERS GALORE—Golfers turn out en masse for the Alabama Agricultural Alumni Association's annual Ag Classic, which this year is set for May 16–17. The event features golf, fishing and clay-shooting tournaments.

March 26–31
AU Spring Break

April 6
Deadline for Applications
Alabama's Ag in the Classroom Summer Institute 2007

This event will be held June 18–20 in Tuscaloosa; its mission is to help teachers integrate agriculture into Alabama's teaching standards. Participants will take part in workshops and farm tours, learning innovative ways to teach agriculture to their students.

Contact: Amy Belcher, Alabama AITC, P.O. Box 3336, Montgomery, AL 36109, 334-240-7126, www.alabamaaitc.org or aitc@agi.alabama.gov

April 12–15
CVM Annual Conference

AU College of Veterinary Medicine
Auburn

This event welcomes alumni and other veterinary professionals and focuses on a wide range of veterinary medicine treatment, research and policy issues.

Contact: 334-844 3699, 1-800-483-8633 (toll free) or www.vetmed.auburn.edu

April 13
Poultry Career Development Day
South District Eliminations

Andalusia

This event provides opportunities for FFA students to compete in poultry judging activities and allows AU poultry science faculty and staff to meet with high school students interested in poultry-related careers.

Contact: Vanessa Kretzschmar at 334-844-2881 or kretzvk@auburn.edu

April 19
The Market at Ag Heritage Park Season Kickoff

Auburn

This event kicks-off the 2007 season of The Market at Ag Heritage Park, a grower-only farmers' market held on the Auburn campus. Produce, art, music and food will be on tap for the event, which will also celebrate Earth Day and focus on sustainable living.

Contact: Katie Jackson at 334-844-5887 or smithcl@auburn.edu

April 21
30th Annual Open House

AU College of Veterinary Medicine
Auburn

8:30 a.m. to 2 p.m.

This free event is hosted by AU veterinary medicine students and offers a chance for people of all ages to learn more about the programs and curriculum of the College of Veterinary Medicine. Counselors will be available for high school juniors and seniors and college students interested in applying.

Contact: 334-844 3699, 1-800-483-8633 or visit www.vetmed.auburn.edu

April 27
Poultry Career Development Days
Central District Eliminations

Montevallo

This event provides opportunities for FFA students to compete in poultry judging activities and allows AU poultry science faculty and staff to meet with high school students interested in poultry-related careers.

Contact: Vanessa Kretzschmar at 334-844-2881 or kretzvk@auburn.edu

April 30
AU Spring Semester classes end

April 30
Women's Philanthropy Board Annual Spring Symposium

The Hotel and Dixon Conference Center
Auburn

Contact: 334-844-9199 or wpbchs1@auburn.edu

May 4
Poultry Career Development Days
North District Eliminations

Hanceville

This event provides opportunities for FFA students to compete in poultry judging activities and allows AU poultry science faculty and staff to meet with high school students interested in poultry-related careers.

Contact: Vanessa Kretzschmar at 334-844-2881 or kretzvk@auburn.edu

May 10
College of Ag Spring Graduation Breakfast

Ham Wilson Arena
Auburn

Spring 2007 AU College of Agriculture graduates and their families will be honored at this breakfast hosted by the AU Agricultural Alumni Association and sponsored by the Alabama Poultry and Egg Association.

Contact: Ann Gulatte at 334-844-2345 or gulatam@auburn.edu

May 16–17
Ag Classic

Auburn

This event offers golfing, fishing and sporting clay tournaments and helps fund AU College of Agriculture scholarships.

Contact: Katie Hardy at 334-844-1475 or katie@auburn.edu

May 17
AU Summer Semester classes begin

May 28
AU Memorial Day Holiday

June 5
State FFA Poultry Judging Competition

Top-placing teams from district FFA poultry judging events will compete at the state FFA convention.

Contact: Vanessa Kretzschmar at 334-844-2881 or kretzvk@auburn.edu

June 18–20
Alabama's Ag in the Classroom Summer Institute 2007

Tuscaloosa

This event helps teachers integrate agriculture into Alabama's teaching standards. Participants take part in workshops and farm tours, learning innovative ways to teach agriculture to their students.

Contact: Amy Belcher, Alabama AITC, P.O. Box 3336, Montgomery, AL 36109, 334-240-7126 or www.alabamaaitc.org or aitc@agi.alabama.gov.

Mid-May
Strawberry Day

The Market at Ag Heritage Park
Auburn

3–6 p.m.

The event will be held on a Thursday afternoon in May (date will be determined in March; call to confirm schedule) as a special pre-season The Market at Ag Heritage Park event. It will feature strawberries at their peak as well as other spring fruits and vegetables, stone-ground grains, cheese and other locally grown or made items.

Contact: Katie Jackson at 334-844-5887 or smithcl@auburn.edu

June through September
The Market at Ag Heritage Park

2007 Regular Season
Auburn

Thursday afternoons

3–6 p.m.

The Market at Ag Heritage Park, a grower-only farmers' market, will hold weekly market days from June through September. During these months, The Market will be open each Thursday afternoon, rain or shine, unless weather conditions are dangerous.

Contact: Katie Jackson at 334-844-5887 or smithcl@auburn.edu

COLLARD COLLECTORS—Jaquice Hughes and John Hubbartt, undergraduate student workers who helped with the harvest, pose with collards that were donated to the Food Bank of East Alabama last fall.

Giving a Little Green

Research Project Donates Collards to Local Food Bank

By Katie Jackson

If you've ever wondered whether or not agricultural research puts food on the table, just ask Martha Faupel, executive director of the Food Bank of East Alabama.

Faupel—the Food Bank, actually—was the recipient last fall of 1,544 pounds of fresh collard greens that were grown as part of a research project being conducted by AU agronomy and soils doctoral candidate Mike Mulvaney.

Mulvaney's project, which began in October 2005 and will continue until fall 2008, is funded in part by Sustainable Agriculture Research and Education monies and is looking at ways to reduce herbicide use in no-till farming.

"No-till farmers rely heavily on herbicides because they cannot cultivate for weed control," explains Mulvaney. "We wished to see if we could reduce herbicide use for fall horticultural crop production by using high-biomass summer cover crops in conjunction with organic mulches."

The study is testing the effectiveness of an annual rotation of winter rye followed by a high-biomass summer cover crop (in this case Mulvaney and his team used forage soybean, a legume, versus sesame, a non-legume). Into this residue, collard seedlings are transplanted. About three weeks later, organic mulches, including mimosa prunings, wheat straw and sericea lespedeza are applied to some plots.

"The idea is to produce a thick layer of residue on the soil surface in order to suppress weeds and build organic matter," says Mulvaney. "We will monitor the experiment for weed suppression, soil water retention, soil organic matter content, soil nutrient status, collard yields and also determine decomposition and nutrient release rates from the organic mulches and cover crops."

"We donated the majority of our collards to the Food Bank of East Alabama because we knew they would put them to good use for low-income families throughout Alabama," Mulvaney says.

When it came time last fall to harvest the herbicide-free collards, which were grown at the E.V. Smith Research Center in Shorter under the watchful eye of center associate superintendent Steve Nightengale and his crew, the research team hated to see them go to waste. So they found a home for the collards.

"We donated the majority of our collards to the Food Bank of East Alabama because we knew they would put them to good use for low-income families throughout Alabama," Mulvaney says. "I was very impressed with their distribution network and efficiency. I intend to donate our collard harvest to the food bank for the duration of our experiment, two years."

Faupel, in a letter of thanks to Mulvaney, said that the collards were "enthusiastically received" by food bank patrons. She noted that the Food Bank of East Alabama works with local nonprofit agencies and churches to distribute food throughout the community, distributing some 300,000 pounds of food each month to more than 180 agencies in a six-county area. These agencies and churches then serve senior citizens, low-income day care centers, rehabilitation centers, emergency food pantries and missions.

"With all of us working together, we can greatly diminish the effects of hunger in our area," Faupel said in her thank-you letter. "We are delighted to partner with you in this important work."

Other AU researchers involved in the study include Wes Wood, Dennis Shannon and Brenda Wood, all in the Department of Agronomy and Soils; Joe Kemble in the Department of Horticulture; and Kip Balkcom with the USDA Soil Dynamics Laboratory in Auburn.

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