

DECISIONS, DECISIONS—Jim Cravey has had and continues to have a long and productive career serving agriculture. He credits his successes in life and work to making a few good key decisions.



MEAT SCIENCE GUY—Randy Huffman, a College of Ag alumnus and son of professor emeritus Dale Huffman, not only leads the American Meat Institute Foundation, he also has his own YouTube videos where he is featured as the Meat Science Guy.



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Fall 2008 Volume 6, Issue

Good Decisions...Great TeachersJim Cravey's Success Hinged on Both

By Katie Jackson

Jim Cravey knows he's made some good decisions in his life. Sure, he's made a few bad choices, too, but his good ones were exceptionally good. So good, in fact, that they helped him become a successful businessman, family man and Auburn man.

Born in 1947 in the small Covington County town of Florala, Cravey grew up on his family's farm along with his brother, Albert, and a cousin (whom Cravey calls his "older foster brother"), Gary Cain.

Their farming operation included corn, hogs, cows and timber and, in the early 1960s, the Craveys also started a butter bean and field pea U-pick operation, a venture that eventually helped Jim on his road to success.

Like many an Alabama farm kid, Cravey got involved early in the local 4-H club. He had quite an act to follow—his father had been the state 4-H corn-growing champ once upon a time—but that simply motivated the younger Cravey to be a dedicated 4-H'er. And it paid off for him. As a 4-H'er, Cravey not only learned valuable skills and lessons, but he also was exposed to the world outside Covington County. One place in particular made a deep impression on him.

"I took my first trip to Auburn as a 4-H'er and I fell in love with the place," says Cravey.

But getting to Auburn as a college student took a few more years and one really pivotal decision. Cravey had spent his whole young life living and working on the farm and being involved in 4-H, so when he had a chance to get involved with the high school vocational agriculture and FFA program, he planned to take a pass.

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Generation Next

Randy Huffman Carrying on Father's Legacy

By Katie Jackson

When Randy Huffman was a child, his family's summer vacations were usually spent at meat science conferences. Now that he's an adult, he still spends lots of time at such conferences, only instead of being on vacation, he goes there to work.

Huffman, a 1986 graduate of the College of Ag's Department of Animal Sciences, is president of the American Meat Institute Foundation in Washington D.C., a high-level job in one of America's oldest industry trade associations. How he got to that position has a lot to do with those childhood vacations.

Huffman's father happens to be AU meat science professor emeritus Dale Huffman, who not only hauled his family to Reciprocal Meat Conference meetings each summer, but also used his family as taste-testers for new meat products he was developing.

The elder Huffman was also often in the news, especially during the early 1990s when his AU Lean product was making national and international headlines. But the younger Huffman recalls an even earlier time when his father was famous—or , maybe, a little infamous.

It was 1970 and consumer activist Ralph Nader was lecturing to a packed house at the AU coliseum. Huffman stood up in the audience and publicly challenged Nader's statements about the health risks of hotdogs and nitrites, then offered to give Nader a tour of a meat-packing plant so he could see firsthand how meat was really processed. Nader declined the offer, but Huffman fully established himself as a vocal member of the meat science community.

The elder's fame continued to grow, and today the name Dale Huffman is one of the most revered in the meat science world—in both academia and industry. Interestingly, though, the son believes his father's fame neither led him to nor deterred him from pursuing a meat science career. It was common sense that eventually snagged him.

"I grew up involved in 4-H and FFA showing livestock—cattle, pigs and sheep," the younger Huffman recalls. He also had mentor Mahlon Richburg, then the Auburn Junior High vocational agriculture teacher, teaching him about showing and raising livestock. When Huffman started college at Auburn he planned to pursue a career in production agriculture working with purebred livestock.

"It didn't take me long to realize that the opportunities were more numerous and more exciting in the meat science field," Huffman says. So he switched the focus of his major to meat science and never looked back.

(continued on page 3)

Roosevelt Street diary

he 2008-09 year is off to a strong start for the College of Agriculture's faculty, staff and students. On the teaching front, we are extremely pleased to welcome 11 new faculty members to the college this fall—at least one new face in every department—with two others set to join the faculty in January.

Our total enrollment of 1,212 is up 2.7 percent from a year ago, with the number of graduate students, at 263, showing a 6-percent jump from fall 2007. And, thanks to the many generous gifts from our donors, the college this year has broken its own record by awarding 232 scholarships totaling \$717,607.

Here on Ag Hill, our mission long has been to equip every student with the tools, resources, knowledge and encouragement he or she will need to build a successful career and a productive life. In today's era of globalization, however, we have an additional obligation: preparing our students to be active participants in an interconnected world.

In a guest column about international education here earlier this year, Auburn University President Jay Gogue recognized the College of Agriculture for its long history of outstanding international agriculture programs in teaching, research and technical help and said it is essential that every college and school incorporate an international dimension into their educational programs.

As Dr. Gogue noted, the College of Agriculture launched its international efforts decades ago, often in the form of providing assistance to fish farmers in underdeveloped countries. Today, the international component is an integral part of who we are.

Right now, eight graduate students from Ocean University of China are at Auburn for a year as part of a five-year graduate student/faculty exchange program involving the Department of Fisheries and Allied Aquacultures and China's Ocean University. The program, paid for completely by the Chinese government so that Ocean University can tap into AU's expertise in fisheries, will also foot the bill for our faculty to travel to Ocean U. as guest lecturers and researchers.

In recent weeks, college faculty have traveled to universities in Vietnam, Costa Rica, and Brazil to discuss the possibility of similar faculty/student exchange programs with them.

For students in the College of Ag, international education opportunities abound. Just visit our Office of International Agriculture's Web site (www. ag.auburn.edu/oia/), and you will see six, eight, sometimes 10, study tours that allow ag majors to see firsthand what agriculture is like outside of the U.S. Some of the destinations for the coming year include Sicily, Switzerland, Greece, New Zealand, Costa Rica, Brazil and Argentina. And in two of our departments, horticulture and animal sciences' equine track, groups of select students spend their summers at Myerscough College in England to attend classes taught by accompanying AU faculty or professors at Myerscough.

Providing international opportunities and experiences that promote cultural awareness and understanding and prepare our graduates to respond to and meet the global challenges and demands of the 21st century will continue to be among the College of Agriculture's chief priorities.

For the College of Agriculture at Auburn University, the international component is an integral part of academic programs. That helps ensure that our graduates understand and appreciate the global environment in which agriculture functions.

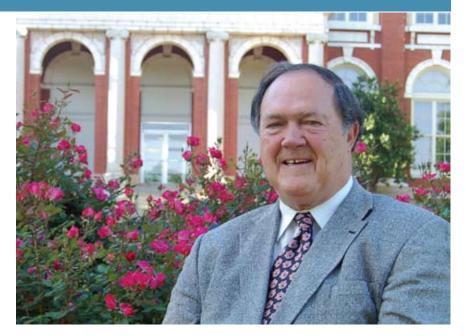
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Richard Guthrie

Dean, College of Agriculture Director, Alabama Agricultural Experiment Station



FROM OCEAN U.—Dong Shuanglin, center, vice president of China's Ocean University, reviews the itinerary he and five other officials from the university will follow during a mid-summer visit to Auburn University, as John Grover, left, AU fisheries professor emeritus, and fisheries department head David Rouse look on. The Chinese government is funding a graduate student/faculty exchange program between Ocean University and AU's fisheries department. The Ocean U. group was here to discuss the possibility of establishing similar programs with other colleges and schools at Auburn.

Ve want to hear from the Field comments. We'd like the Market. Send us your opinions, memories or comments. We'd like to include them in our new Letters from the Field section! Send them to Ag Communications and Marketing, Letters from the Field, Room 3 Comer Hall, Auburn, AL 36849; 334-844-5887; or smithcl@auburn.edu.

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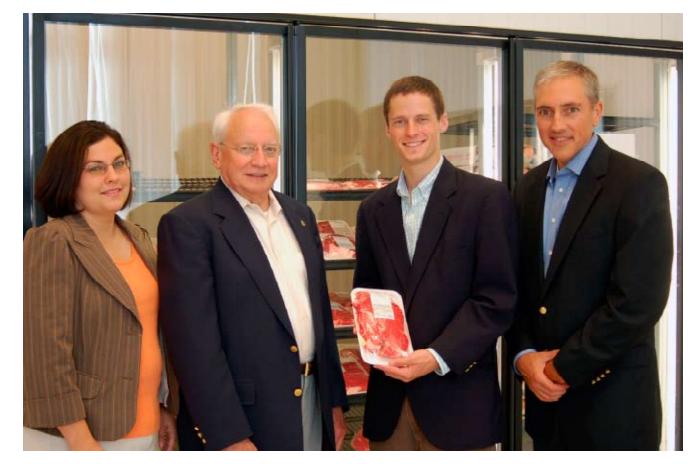
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A PRIME OPPORTUNITY—A new endowed scholarship in the College of Ag for meat science students—the Dr. Dale Huffman Endowed Scholarship in Animal Sciences—has been established and the first recipient—animal sciences senior Matt Nunnelly—has been named. The scholarship was established by Dale Huffman's son, Randy, in honor of his father and also in honor of all that Auburn has meant to the younger Huffman's own career in meat science. Pictured, from left, are Christy Bratcher, a new faculty member in the AU animal sciences department's meat science program; Dale Huffman; Nunnelly; and Randy Huffman.

"There are a lot of opportunities in the meat industry and we need more students from diverse backgrounds..."

As soon as he graduated from Auburn, Huffman went to the University of Florida for his master's and Ph.D. degrees in meat science, then went to work for Fairbank Farms, a fresh meat-processing firm based in Ashville, N.Y. From there he moved to Wichita, Kan., for a job managing food safety and product development issues for Koch Industries, Inc.'s Koch Beef Company. In 2000, he joined the AMI staff as vice president of scientific affairs. He was promoted to president of the AMI Foundation in April 2008.

AMI was established in 1906, and Huffman estimates that 90–95 percent of all meat products manufactured in the United States are produced by AMI-member companies. Huffman's role at AMI is to manage the foundation's research initiatives, industry best practices development and educational programming.

According to Huffman, food safety is a primary focus for AMI.

"When I was a student, a key focus of the meat industry was on nutrition and the role of fat in the diet," he says. "That has changed. It's now food safety. Our industry is very committed to producing safe and affordable foods and we are trying to find solutions to produce even safer products."

It is also a personal ambition for Huffman. "Continual progress in reducing food safety hazards in the meat supply is my goal," he says. "That's what I work on every day."

A YouTube Regular

To that end, Huffman has become something of a media celebrity himself. In fact, he's on YouTube, where he has a lead role in "Ask the Meat Science Guy" videos (www.youtube.com/meatnewsnetwork). The nine-part, short video series provides answers to common questions about meat safety, addressing issues ranging from safely cooking steaks and burgers to the safety of cured meats and nitrite.

In addition, Huffman has appeared on such television networks and shows as ESPN, CNN, Good Morning America, NBC, CBS Nightly News, Fox Business and The History Channel, and his editorials have been published in USA Today and The Washington Post.

The younger Huffman certainly has made a name for himself in the meat science field, but he has never lost sight of his father's contributions nor of Auburn's impact on his life and career. Because of that, Huffman has established the Dr. Dale Huffman Endowed Scholarship in Animal Sciences that will provide scholarships to meat science students at Auburn.

"I felt that I needed to give back to Auburn, specifically to the meat science program in animal sciences because it is where I got the passion for the industry and learned the basics that have served me well in my career," the

younger Huffman says. "I also wanted to honor my dad because of what he has meant to me and my career.

"There are a lot of opportunities in the meat industry, and we need more students from diverse backgrounds with solid academic training entering the field," says Huffman.

This scholarship will truly benefit the AU meat science program, says Christy Bratcher, a new faculty member in the AU animal sciences department's meat science program.

The Huffman Legacy

"I think it is especially great that it is honoring someone such as Dr. Huffman, whom we all admire in the meat industry," Bratcher says. "Having a scholarship in his name lets us share his legacy with students and shows them that meat science and our undergraduate studies in meat science are important to Dr. Huffman and his family."

Matt Nunnelly, a senior from Hoover majoring in animal sciences with an interest in pursuing a career in meat science, is the first recipient of the scholarship, which he says has been a true honor and a big help to his family.

"It is great to have people supporting meat science and what we want to do," says Nunnelly, who will graduate in May 2009. "It's also great because earning the scholarship is a way that I, as a student, can give back to my family and show them that I am working hard to help them out."

Though Huffman has supplied the funds required to endow the scholar-ship and award it annually, additional funds are still needed to build it into a larger endowment so even more scholarships can be made available to students. For more information on how to contribute to the endowment, contact the College of Ag Development office at 334-844-1475 or agdevelopment@auburn.edu.





Success is measured in the way we touch people's lives.

"I figured I already knew a lot about agriculture, and anything else I needed to know I could learn from my dad," he says.

Change Of Heart

But his mind was changed by a visit from the high school vocational ag teacher, W.F. Raspberry. "We lived on a dirt road about 15 miles from town and Mr. Raspberry came all the way out there to see me and ask why I was not taking vocational ag," recalls Cravey.

Cravey explained to Raspberry his reasons for not signing up, but then Cravey asked the teacher if FFA, like 4-H, offered opportunities for trips or contests.

According to Cravey, Raspberry replied, "What we do is try to help you get an education to help you make money to pay your own way." That made great sense to Cravey so he immediately signed up for vocational ag.

"That was one of the best decisions I made in my life," Cravey states. "For a teacher to drive that far on a dirt road to come see me as a student and ask me to take his class, that impressed me and certainly made me want to do it."

Cravey went on to earn his FFA American Farmers degree, thanks to the work he did on the family U-pick operation, and served as state FFA president in 1964 during his senior year in high school.



STILL TAKING AIM—Jim Cravey may have retired from the Alabama Farmers Federation, but he has far from retired from supporting Auburn and agriculture. In fact, last May he was one of many College of Ag friends and alumni who participated in the Ag Classic shooting clay and golf tournaments.

It was through FFA that Cravey also made important contacts. For example, when he first came to Auburn to college, his FFA connections led him to Alpha Gamma Rho fraternity. "That was another great milestone in my life," says Cravey. Through the fraternity, he made lifelong friends, established invaluable business contacts and, most important, met the woman he would later marry.

The Girl Of His Dreams

That woman was Paula Daniel, a Mississippi girl who was at the time a student at Mississippi State College for Women. She had come over to Auburn for a party and she caught Cravey's eye. He managed to wrangle one date with her that year, but did not see her again until the following fall when she transferred to Auburn and was going through sorority rush.

"I saw this girl crossing the street and thought it was her, but during rush she couldn't talk to boys," he recalls.

Since Cravey couldn't approach her and impress her with his charms that day, he had to wait to ask her out. But that worked in his favor. "I'm notorious for not remembering names and I could not remember hers, so I had to go back through my channels to find it out. But I distinctly remember what she was wearing that day. She had on a bright yellow dress and great tan."

The two dated throughout their college years and all the while, Cravey thoroughly enjoyed school. He became a leader in his fraternity, eventually serving as president of Alpha Gamma Rho, and truly relished his college years.

"I stayed at Auburn a good while and I would have stayed longer if I could have afforded it," he says. But affording it was a challenge, one he was funding by selling his cows, borrowing money and through an occasional scholarship.

When he graduated from Auburn in 1970 with the agriscience education degree (and a minor in ag business), Cravey went right to work thanks, again, to his FFA connections.

"One of the vo-ag teachers from north Alabama that I'd known in high school said to call him when I was within a quarter or two of graduating because he had a brother in the poultry industry," says Cravey. Sure enough, that contact led to Cravey's being hired by Con-Agra in Dalton, Ga., where he stayed for about six months.

He had also joined the Alabama National Guard and was called to active duty shortly after graduation. He stayed in the Guard for six years, serving initially in the Florala unit and then moving to the Montgomery unit, where he became a photo journalist. "I had to learn photography on the job, but I loved it," says Cravey.

A Farm Bureau Man

Just six months after he had joined the Con-Agra staff, Cravey was offered the position as the first-ever full-time Alabama Farm Bureau (now Alabama Farmers Federation) Young Farmers Program director—another great decision on his part. And he also married Paula about that time—truly the best decision he ever made.

Four years later he was promoted to director of the organization's Commodity Department and also served as director of the Dairy Division.

Cravey worked there for another 30-plus years, retiring in 2005, and all the while he loved his job. "I made lifelong friends there and some of the ones I had the greatest respect for were the farmers that I worked with," he says. "I learned so many lessons and was so fortunate as a young man to have mentors, especially in the dairy business" (which Cravey knew nothing about when he started that job).

Many of his efforts in the Federations' Commodity Department focused on supporting state and federal legislation to help farmers, which Cravey found extremely rewarding but also required a great deal of help from others.

"We worked hard at preparing and presenting information to Congressmen and their staffers and we wanted to make sure they knew both sides of any controversial issue," he says. "We relied heavily on Auburn University and its technical expertise to make sure our facts were correct."

Cravey returned the favor to Auburn and the land-grant system many times over, serving in many capacities including as a member of the Council for Agricultural Research, Extension and Teaching and the AU College of Agriculture Dean's Advisory Council. He also served three years on the national Cooperative Extension System Committee on Policy and he traveled overseas with Auburn faculty and administrators to learn more about international agriculture.

A Tragic Blow

Meanwhile back at home, Paula was Cravey's strongest supporter and the two of them stayed busy rearing their two children, Chad and Ashley. But tragedy struck the Cravey family in 2000 when Paula died from complications following a bone marrow transplant.

The loss was devastating to the entire family, but her memory and support live on through her children and grandchildren. A scholarship was established in her name in early childhood education at AUM, where Paula was assistant director. Chad now lives in Madison, Miss., with his wife, Maggie, and their two children, Blake and Mary Ellis. Ashley lives in Birmingham with her husband, Will Gregory, and they have 2-year-old twin boys, Harris and Henry, and are expecting a daughter this fall.

Cravey continued to work after Paula's death but retired in 2005. That same year he remarried another amazing Mississippi girl, Cindy Kabase. She, too, is an educator who taught for 30 years in Florida before retiring. "When I decided to retire we looked at two places to move—Auburn and the Shalimar/Fort Walton Beach area of Florida." Florida won out in part because it is just 65 miles from the Covington County family farm, which Jim and brother Albert still operate as a cattle, timber and hunting operation.

Cravey not only helps at the farm, but he remains active in many agricultural activities at Auburn. One area that he is particularly passionate about is working with Aetos Technologies, an Auburn-based technology development and transfer business.

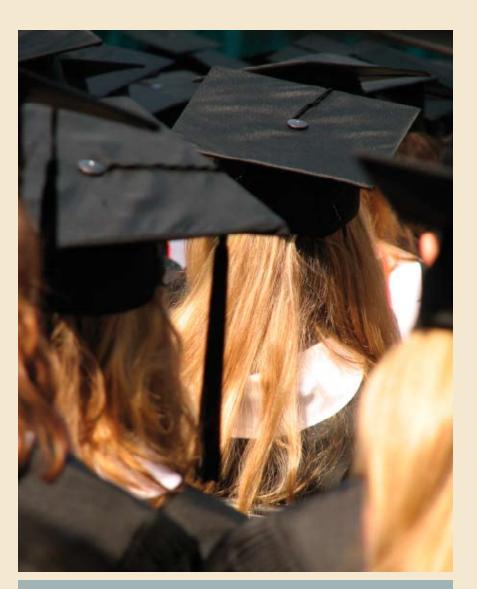
Cravey also has found a way to give back to Auburn and simultaneously honor the teachers who helped him make so many great decisions. He has established the Cravey Family Endowed Scholarship in Agriscience Education, which will fund at least two scholarships for students majoring in agriscience education at Auburn.

"Teachers that influence us are focused on people, not things," says Cravey. "They create a desire for students to want to achieve and do something. Teachers just touch our lives."

Through this scholarship, Cravey hopes to nurture future generations of teachers who can touch lives and help other young people make great decisions.

"Success is measured in the way we touch people's lives," says Cravey. Perhaps this scholarship will do just that for generations to come.

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Cravey Endows Scholarship for Agriscience Education

Jim Cravey, an Auburn alumnus and former director of the Alabama Farmers Federation Commodity Department, has established a new scholarship fund for College of Ag students majoring in agriscience education.

The endowed scholarship, named the Cravey Family Endowed Scholarship in Agriscience Education, will provide at least two scholarships beginning fall semester 2009 through an initial gift of \$43,635, but more contributions are needed to fully endow the scholarship.

To contribute to this fund, contact the College of Agriculture Development Office at 334-844-1475 or agdevelopment@auburn.edu.

The Roots of Her Career: Family Influences Hort Professor's Choice of Plants and People

By Leigh Hinton

Little did Carolyn Walton Robinson know that interning at The Land pavilion at Epcot during her junior year at Auburn would shape her future career choice.

"I worked in the greenhouses at Epcot in The Land pavilion," Robinson says. "People would come in for a behind-the-scenes tour, and I realized how much I liked interacting with people, showing them about plants. That internship pulled me toward people and teaching."

Her return to Auburn to join the Department of Horticulture faculty in 2006 has brought her full circle, back this time as assistant professor in the horticulture department where she earned her undergraduate degree in 1996. Her internship at Epcot and her experiences in Florida and Texas, where she earned her master's and Ph.D. degrees, respectively, also shaped her career choice and life, but Robinson traces the roots of her career to childhood influences.

Robinson grew up in west Alabama, in Akron, where she lived close to her mother's parents. Her mother and grandmother were avid gardeners-"plant people," she says—and she always enjoyed helping them.

But when she enrolled at Auburn, as her grandfather had done many years before, her first declared major was biomedical science.

"I had the idea that I wanted to go into the field of medicine," she recalls. "I thought I wanted to work with animals, but I found out pretty quickly that wasn't for me."

In A New Direction

Unhappy with her chosen major, Robinson sought the advice of the College of Agriculture's assistant dean at the time, Bill Alverson, whom she had met at a camp while she was in high school. After listening to her story, Alverson suggested she switch to horticulture.

"He told me I could cut on plants all day long. I still remember him saying that," laughs Robinson.

Horticulture was a happy fit for Robinson, and after earning her bachelor's from Auburn, she headed south, to graduate school at the University of Florida. It was there that her major professor introduced her to the field of sociohorticulture—the relationship between people and plants and the ability of this relationship to reduce stress and bring about positive changes in people's lives.

Once she had her master's, that same professor urged her to pursue her doctorate, which she did, at Texas A&M University. There, she worked with Jayne Zajicek, a pioneer of the science of people-plant research, bringing together the disciplines of horticulture, educational psychology, agricultural education, sociology, elementary and secondary education and environmental education.

It was also at the University of Florida that Robinson met and married Mike Robinson, now her husband of almost 10 years. They had "met," so to speak, several years earlier when both were part of the 80,000-plus crowd in the Auburn stadium at the AU-UF game in 1996. Robinson was in her last quarter as an undergraduate at Auburn and her future husband was an undergraduate at the University of Florida when Auburn defeated the highly ranked Gators. Neither of them realized this coincidence until years later.

Happily, the marriage survived that realization, and together they moved to College Station, Texas, where Robinson worked on her Ph.D. with Za-

Focus on Youngsters

At Texas A&M, Robinson's love of the plants-people relationship truly blossomed. Working with elementary school students, she helped launch the Junior Master Gardener program, an international program that promotes gardening among youths.

Robinson helped write the curriculum, produced activities and maintained a Web site with online activities for the Junior Master Gardener pro-







PASSING ON A PASSION—Carolyn Robinson, assistant professor in the horticulture department, has passed along her passion for plants to her sons, 2-year-old Gabriel and 10-month-old Cayden. It seems to be working because Gabe loves cherry tomatoes, so much so that he eats with both hands.

gram for grades three through five. That curriculum, which has been used globally and throughout the U.S., focuses on landscaping, nutrition and life skills, such as volunteerism, self-esteem, leadership, communication and decision making.

"You don't realize all of the different things children can learn from gardening: math, literature, science, environmental education like recycling and composting and communications skills, including planning and decision making," says Robinson.

After completing her Ph.D., Robinson and her husband moved back to Florida, where she had a job with the University of Florida at the Mid-Florida Research and Education Center in Apopka. Not long after, they moved back to Texas where she taught at Sam Houston State University in Huntsville, Texas, for four years before returning to Auburn.

In her position at Auburn, Robinson teaches several undergraduate classes including intermediate landscape design, computer-aided landscape planting design and interior plants and floral design.

At home, Robinson's time, attention and energy are devoted to sons Gabriel, 2, and Cayden, 10 months. When asked if she has time to garden, she smiles and says she's like the cobbler who has no shoes — although this year, she and Gabriel did grow an impressive crop of cherry tomatoes in containers.

"He loves to go outside and pick them and pop them into his mouth," she says. "Who knows what career he'll grow into."

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

Alabama 4-H Celebrates Centennial Year

Alabama 4-H, the state's oldest youth development organization, kicked off its Centennial Year Friday and Saturday, Aug. 29 and 30, with celebrations honoring its past and looking to its future. Festivities were held on the Auburn University campus, the state headquarters of Alabama 4-H.

Auburn President Jay Gogue helped get the celebration rolling as he noted the vital role 4-H plays in the development of youths as well as in Auburn's historic land-grant mission. The program, he said, "has been absolutely instrumental in everything the land-grants have accomplished.

"As an Auburn student 40 years ago," Gogue said, "I was taught about hybrid corn and how it gained popularity because kids in 4-H took it home, and when their dads saw their sons' corn yield was four times their own, they took notice. Before that, farmers had been resistant to agents' suggestions.

"4-H has always been a powerful agent for change in our society, and there is no doubt that it is the largest, most important youth organization in Alabama and the country," Gogue added.

Before the recognition ceremony to mark the Centennial, two dozen Alabama 4-H'ers, volunteer leaders and regional Extension agents showcased current 4-H projects, programs and activities, and members of the Alabama 4-H State Council dipped Blue Bell's 4-H Centennial Cupcake ice cream and handed out water to Auburn students, faculty and staff.

The next day, nearly 1,000 Alabama 4-H'ers and volunteer leaders from more than 50 Alabama counties were guests of the Auburn Athletics Department for the football season opener against the University of Louisiana-Monroe. In the new Student Center prior to the game, 4-H youths enjoyed a tailgate barbecue, a welcome from Dean of Students Johnny Green and a special visit by the AU Cheerleaders.

In his comments during the celebration, Gaines Smith, director of the Alabama Cooperative Extension System, hailed 4-H as a vital part of life in Alabama.

"The special thing about 4-H is that through our educational programs, the lives of so many youths, including me, have been changed," Smith said. "The 4-H experience is individual to each person, and that continues to be its strength today. Through 4-H, youths learn about subject matter, but as importantly, they learn about serving their community, they take on leadership responsibilities and they shape their future."

Lamar Nichols, assistant director for 4-H and Youth Development with the Alabama Cooperative Extension System, said celebrating the past is great but that program leaders must also look to the future.

"Alabama 4-H is a program of rich heritage and dynamic youths who have bright and promising futures because of 4-H," Nichols said. "Alabama 4-H youths are more confident, and they are empowered to reach their full potential through 4-H."

The first youth clubs in Alabama began in 1909 in Anniston and Tuscaloosa as boys' corn clubs, where the main competition—corn harvesting—awarded \$25 to the member who brought in the most bushels. In 1911, Alabama organized girls' tomato clubs in Pike and Walker counties.



CELEBRATING A CENTURY—Operation Military Kids coordinator Charlene Hines hands out balloons to Lauren and Mitchell DeWeese of Auburn during the kickoff celebration of 4-H's centennial year. 4-H is a national partner in OMK, which provides specific programs to support youngsters whose parents or close family are deployed through the military or the National Guard.

Nichols said employees continually work to ensure the development needs of youths are being met. New curricula are being developed to stay abreast of current technology, and a new program being introduced this fall will allow 4-H'ers to use YouTube in an added competitive event.

Alabama 4-H is offered in all 67 counties. More than 58,000 youths participate in a variety of 4-H clubs, special interest clubs, activities, events and competitions throughout the state.

During 2008–09, centennial celebrations are being planned across the state, including local, county and regional events. To learn more about Alabama 4-H, go to www.alabama4h.com.

Extension's Smith Earns National Award

Alabama Cooperative Extension System Director Gaines Smith has earned the 2008 National Distinguished Service Ruby recognition from Epsilon Sigma Phi, a national organization of Extension professionals. The Distinguished Service Ruby, Epsilon Sigma Phi's most prestigious award, recognizes outstanding thinking, performance and leadership in Extension and the significant contributions the individual has made to Extension at the state, regional and national levels.

Smith was honored at the recent Galaxy III conference in Indianapolis. At the conference, he gave the Ruby Lecture during a luncheon recognizing his achievements.

A member of ESP for 33 years, he called the award a high point in his 43-year Extension career.



Smith

"I accepted the Ruby Award not just for myself, but for all of the dedicated Extension professionals in Alabama," he said. "This award is a testament to the history and success of Extension in our state."

Smith was nominated for the award by Alabama's Alpha Pi Chapter of Epsilon Sigma Phi. Tammy Powell, chapter president, says Smith has served Extension "with the spirit of a true leader" and was most deserving of national recognition.

Smith began his career as a Jefferson County Extension agent. He then served at the district level before joining Alabama Extension's state administrative team in the 1980s. He directed the shift from county-based and generally focused programming to regionally based programming, which focuses Extension educational efforts within 14 program priority teams.

Clay Classic Nov. 14

A Clays for Clovers Sporting Clay Classic that Birminghambased international construction company B.L. Harbert is sponsoring to benefit Alabama 4-H is set for Friday, Nov. 14, at Selwood Farm near Childersburg.

The entry fee is \$1,200 per four-person team. Shotgun starts are set for 8 a.m. and 1 p.m. The deadline for registering is Oct.

For more information, contact Nancy Alexander at 334-844-2219 or alexana@auburn. edu.

B.L. Harbert became interested in 4-H while building the 17,500-square-foot 4-H Environmental Science Education Center on Lay Lake near Columbiana.

departments

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

Agricultural Economics & Rural Sociology Curtis Jolly, 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/fish/

Horticulture Joe Eakes, Acting Head 334-844-4862 www.ag.auburn.edu/hort

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

Faculty Accomplishments

Two College of Agriculture faculty members—ag economics alumni professor **Patricia Duffy** and horticulture professor **Jeff Sibley**—have been appointed to one-year half-time university-wide positions. Duffy is serving as Auburn's assistant provost for Undergraduate Studies. In that appointment, which became effective Aug. 6, she is providing leadership to the Special Lectures Committee and working to develop interdisciplinary program initiatives. Sibley, meanwhile, has been appointed acting associate dean of the AU Graduate School, effective Aug. 16. Sibley's top goal in the new post is to significantly increase graduate school enrollment. Both Duffy and Sibley continue to work in their respective departments half days.

The Auburn Alumni Association has awarded two of its most prestigious honors to agronomy and soils professor **Joey Shaw**. The association has designated him one of five alumni professors for the 2008–2009 academic year, based on his research, publishing and teaching accomplishments. In addition, the group has selected him as one of three AU faculty members to receive the 2008 Auburn Alumni Association Undergraduate Teaching Excellence Award. Shaw, a soil scientist, has been on the faculty at Auburn since 1998.

Conner Bailey, rural sociology professor, is one of six AU faculty members who have been chosen as recipients of AU's first-ever Distinguished Diversity Researcher awards, sponsored by Auburn's new Research Initiative for the Study of Diversity. Bailey, who has been on the faculty since 1985, was selected based largely on his 20-plus years of research focused on race and ethnicity.

The College of Agriculture welcomes 11 new faculty members this fall, at least one in every department. They include Michelle Worosz, assistant professor, rural sociology, in ag econ and rural sociology; Terry Brandebourg, assistant professor, muscle biology and growth and development, and Christy Bratcher, assistant professor, meat science, both in animal sciences; Navin Twarakavi, assistant professor, soil physics, in agronomy and soils; Sushil Adhikari, assistant professor, bioenergy, in biosystems engineering; Leonardo De La Fuente Berardi, assistant professor, molecular plant pathology, and David Held, assistant professor, turf and ornamental entomology, both in entomology and plant pathology; Stephen Bullard, assistant professor, fish pathology, and Terrill Hanson, associate professor, aquacultural economics, both in fisheries and allied aquacultures; James Spiers, associate professor, tree fruit crops, in horticulture; and William Dozier III, associate professor, broiler nutrition, in poultry science. The latter is son of long-time AU horticulture professor Billy Dozier.

The U.S. Environmental Protection Agency's Gulf of Mexico Program Office has awarded \$300,000 in funding to a three-year environmental education project that Auburn fisheries research fellow and Alabama Water Watch patriarch **Bill Deutsch** proposed and will direct. The project, "Fostering Environmental Stewardship of the Gulf of Mexico: A Trans-Boundary Network of Water Education and Monitoring for Animal Producers, Classrooms and Community Volunteers," is designed to teach cattle and trout producers, vol-

unteer water monitors and educators in five U.S. and six Mexican states that border the Gulf of Mexico that they can play a role in helping alleviate some of the Gulf's many water-quality problems. Co-principal investigators include **Frank Owsley**, AU animal sciences professor and statewide Extension livestock environmental specialist.

Steve Taylor, biosystems engineering professor/department head and AU Center for Bioenergy and Bioproducts director; **John Jensen**, retired fisheries professor and former dean of the college; and Larry Fillmer, executive director of Auburn's Natural Resources Management & Development Institute, were part of a trade mission state ag commissioner Ron Sparks led to Argentina and Brazil in September.



A GIFT FOR YOU—Auburn biosystems engineering faculty member Yifen Wang, right, and Guizhou Dai, president of Hubei Academy of Agricultural Science, hold up a commemorative Auburn biosystems engineering throw for others to see. The blanket features a photo of the department's much-prized steam tractor, Old Nancy. Wang has been a visiting professor at Hubei since 2006.

Biosystems engineering assistant professor and food safety authority **Yifen Wang** had a busy summer, both at home and abroad. In May, he spoke at the International Forum on Food Safety for the 2010 Shanghai World Expo, an event for which he is serving as a food safety adviser to the planners, and participated in an academic exchange with Hubei Academy of Agricultural Science, presenting lectures to academy scientists and conducting joint research with them on maintaining the quality of fisheries food products. He also helped three fisheries processing plants align their food safety standards with international regulations. Back in the U.S., in the days leading up to the 2008 Beijing Summer Olympic Games, Wang made several media appearances because of his role as a member of the Olympics food security panel that advised Olympic organizers on food safety and food security.

Kyung Yoo, biosystems engineering professor, recently visited with the Department of Agricultural Engineering of the State University of Sao Paulo, Brazil, to discuss opportunities for faculty and student interchange and collaboration. While there, he visited an ethanol production plant and the world's largest hydroelectric power generation plant.

The Department of Animal Sciences faculty hit the road to the Wiregrass in August for a two-day faculty retreat and tour. The trip included a day-long planning session at the Wiregrass Research and Extension Center in Headland, in which faculty members mapped out strategies to move the department's teaching, research and Extension programs into the future, and a tour that included stops at two forage-fed beef operations, a diversified farm and an equine operation. Faculty members **Russ Muntifering**, **Darrell Rankins** and **Frank Owsley** planned and organized the retreat and tour. Department head **Wayne Greene** says the tour enabled the animal scientists to "bring a part of Alabama" to their classrooms.

Agronomy and soils professor of forage and energy crops **David Bransby** and Wayne Keith, Alabama farmer and Renewable Energy Systems LLC partner, have proved they'll go the distance to promote renewable energy. Riding in Keith's 1991 bright-green Dodge Dakota V8 that's equipped with a gasifier and powered by switchgrass, crop residues, poultry litter and other biomass materials, the two departed from Charleston, S.C., Sept. 29 on a three-week,

coast-to-coast-and-back renewable energy tour. The itinerary called for the California-bound "Green Team" to make a number of media stops on the way to the West Coast, then participate in a Berkeley road race for vehicles powered by fuels not available commercially and, somewhere around Oct. 17, cross the line back into Alabama. The tour's goal: to raise awareness of renewable energy and its economic, environmental and social benefits.

Nada Nadarajah, animal sciences research fellow, attended the International Goat Association's ninth annual International Conference on Goats in Queretato, Mexico, in September and gave a presentation on a performance record-keeping software program he has developed for meat goat producers.

Student Accomplishments

Alpha Epsilon, the honor society for outstanding agricultural and biological engineering, has recognized AU's Delta Beta chapter as the most improved chapter for 2008 among all U.S. and international chapters. The Auburn chapter was formed in 1980 but became inactive in the late 1990s. Three years ago, biosystems engineering assistant professor **Puneet Srivastava** and then-student **Sarah Sanders** volunteered to revive the chapter and renew efforts to recognize scholarship and professional attainment in the agricultural and biological engineering profession. The reactivated chapter initiated new members in 2006 and elected a slate of officers that began the chapter's growth.

Biosystems engineering's **Daniel Mullenix** won first place in oral presentations in the American Society of Agricultural and Biological Engineers' Undergraduate Student Poster Competition, held during the association's international annual meeting in Providence, R.I. Co-authors on the "Controlled Conveying and Heating of Oilseeds to a Mechanical Screw Press" poster were **Matthew Vera** and **Kristen Grimes**. The poster described their senior capstone design project to support the production of vegetable oil for subsequent conversion to biodiesel. Mullinex graduated in May and now works as research engineer for the department.



A LITTLE FINE-TUNING—Eagle Pullers team members, from left, Ben Bradford, Joe Colfield and Steven Sparks (behind the steering wheel) prepare their 1/4-scale tractor for technical inspection before the competition begins.

The War Eagle Motorsports Eagle Pullers team participated in the 2008 ASABE International 1/4-scale Design Competition recently in Peoria, Ill. The competition, which emphasizes engineering design skills, involves the design and fabrication of a 1/4-scale competition tractor and culminates in a tractor-pulling competition. Auburn's team included students **Jonathan Griffith**, **Steven Sparks**, **Joe Colfield** and **Ben Bradford** and advisers **Tim McDonald**, biosystems associate professor, and research engineer **Christian Brodbeck**. The team finished 20th overall.

Shortly after College of Ag senior **Jarrod Stewart** is awarded his bachelor's degree in agronomy and soils in May 2009, he will travel to Florida to begin a six-month professional internship he has landed at Epcot. As part of the Epcot Science Team, the agronomy and soils/production track major will work in the hydroponic greenhouses that are part of Epcot's "Living with the Land" attraction; he'll also lead visitors on tours through the greenhouses. The hydroponic greenhouses assignment is perfect for Stewart, whose ultimate career goal is to return to his native Ozark and build hydroponic greenhouses in which he'll grow produce year-round.

Two College of Ag students who represented AU's Bass Sports Club in the 2008 Under Armour College Bass National Championship in Little Rock, Ark., over the summer finished fifth among the 53 schools competing. **Richard Peek**, a poultry science senior, and **Adam Murphree**, a junior in ag communications, had a strong hold on first place going into the third and final day of the event, but on day three, things didn't go their way. They came in behind the University of Arkansas-Little Rock followed by Texas A&M, Faulkner University and the University of Alabama.

Agronomy and soils doctoral candidate **Mike Mulvaney** has been selected as the 2008 recipient of the Soil Science Society of America's Division S-6 Graduate Student Award. S-6, the SSSA's Soil and Water Management and Conservation Division, presents the award annually to a graduate student who uses creative approaches to gain understanding of and develop solutions for soil and water conservation and management problems. Mulvaney's research focuses on finding sustainable methods to feed an expanding population. Specifically, he is studying organic mulches and high-residue cover crops in no-till systems; peanut residue decomposition and nutrient release rates under conservation tillage; and alley cropping for soil conservation. Mulvaney was nominated for the award by his major professor at Auburn, **Wes Wood**. The division will present the award to Mulvaney during the SSSA's joint annual meeting in Houston, Texas.

Troy Farmer, who holds a bachelor's degree in fisheries management from Auburn and will be awarded his master's in fish ecology in December, was one of 10 fisheries graduate students nationwide to be awarded the American Fisheries Society's 2008 Skinner Memorial Award. That honor carries with it a cash award that winners use to attend the society's annual meeting. At the 2008 meeting, held in Ottawa, Canada, in August, Farmer presented his master's research and was selected to be part of the "Best Student Paper Symposium," which included the top 16 student presentations at the meeting. His master's research focused on the dynamics of mercury bioaccumulation in largemouth bass and Southern flounder in Alabama's Mobile-Tensaw River Delta. His co-advisers were fisheries professors Dennis DeVries and Rusty Wright. Though Farmer officially won't receive his M.S. until December, he already has completed his master's work and moved to Columbus, Ohio, to begin his Ph.D. studies in evolution, ecology and organismal biology at Ohio State. His career goal is to become a fisheries researcher at either the federal level or a research university.

Agricultural economics junior **Chrissy Weaver** took top honors in a speech contest sponsored annually by the Auburn Agronomy Club in September. Ag econ senior **Jenny Gvillo** placed second, and agronomy junior **Kim Pope**, third. As first-place winner, Weaver, whose topic was "Our food is safe for humans to eat because . . .," went on to represent Auburn in the National Student Speech Contest held in Houston, Texas, in conjunction with the annual meeting of Students in Agronomy, Soils and Environmental Sciences. That competition was in early October—too late to announce results in this issue of Ag Illustrated.



CATTLE TOUR—Eleven animal sciences majors arrived on campus a week early for fall semester to be part of a three-day, Alabama Cattlemen's Association—sponsored summer beef cattle tour through central and west Alabama. The students—Josiah Greene, Carrie Richmond, Hope Burge, Jody Grace, Paul Walrath, Kane Simpkins, Christi Chesnut, Mindy Hiddle, Cody Horton, Jennifer Beckett and Garrett Denney—visited Lane Cattle Company in Lowndesboro, the Black Belt Research and Extension Center in Marion Junction, the Central Alabama Farmers' Cooperative in Selma, Pine Grove Ranch in Newbern, Cow Creek Ranch near Aliceville, Dee River Ranch in Aliceville and Sunshine Farms near Clanton. At Dee River, the students lent a hand working newly weaned calves before taking a tour of the ranch.

elsewhere in the AAES

News from the Alabama Agricultural Experiment Station's affiliated school and colleges.

College of Human Sciences

June Henton, Dean 334-844-4790 www.humsci.auburn.edu



SHOW OF SUPPORT— Kristy Myers, left, CHS director of Development, accepts a contribution from Sen. Ted Little as June Henton, Human Sciences dean, looks on.

Little Shows Support for College of Human Sciences

State Sen. Ted Little (D-Auburn) recently presented the Auburn University College of Human Sciences a \$5,000 contribution to the Lois Hammond Meadows Endowment for Tuition Awards in the Auburn University Early Learning Center. The gift was made in honor of Lois Meadows, former center director, and will enable the college to provide need-based tuition assistance to families with preschool children attending the center.

"Lois Meadows was a dedicated employee of the AU Early Learning Center for many years," Little said. "It gives me great pleasure to honor her love and loyalty with a gift to her endowment."

During the presentation, Sen. Little also gave \$3,000 to the Dean's Signature Society. This gift will fund student scholarships, faculty awards and costs associated with the Joseph S. Bruno Auburn Abroad in Italy, the College of Human Sciences' study abroad program in Ariccia.

"Sen. Little has been a dedicated member of the Dean's Advisory Board for the College of Human Sciences for many years and has committed himself to promoting educational excellence for the college and for Auburn University as a whole," Henton said in accepting the contributions.

WFP Staffer, Child Hunger Adviser Joins CHS

A United Nations World Food Programme staff member who most recently served as WFP's special adviser on child hunger, has come to Auburn as a distinguished visiting professor in the College of Human Sciences' Department of Nutrition and Food Science. June Henton, dean of the college, said the assignment of Douglas Casson Coutts marks the first time the world's largest humanitarian agency has placed one of its staffers in such a role.

While at Auburn, Coutts will be part of the CHS administrative team and will teach courses on hunger, assist in developing a hunger studies minor and support the domestic and international growth of Universities Fighting World Hunger, a joint partnership led by WFP and Auburn with a current membership of more than 70 universities in North America and abroad.

Courts has more than 23 years of experience with WFP. Serving as country director for Bangladesh, he oversaw the organization's single largest development operation, which encompassed integrated food security and nutritional support; school feeding and refugee operations; and community health programs including HIV/AIDS projects.

In addition to Bangladesh, Coutts has represented WFP in North Korea, Nepal and Namibia, and he has served as the agency's representative to the United Nations, United States and Canada.

Women's Philanthropy Board Hears Power Exec

More than 300 people attended the 2008 Women's Philanthropy Board fall luncheon in September to hear featured speaker Susan Story, an AU alumna and president and CEO of Gulf Power Company in Pensacola, Fla.

Story has been at the helm of Gulf Power Company, a subsidiary of Southern Company and one of the largest producers of electricity in the U.S., since 2003. She joined Southern Company in 1982 as a nuclear plant engineer and has since held a number of positions including executive vice president of Southern Company Engineering and Construction Services, vice president

of Southern Company Supply Chain Management and vice president of Real Estate and Corporate Services at Alabama Power Company.

In addition to her professional leadership, Story is an active philanthropist, serves on numerous industry, civic and statewide boards and has held a variety of political appointments.

"Susan represents an ideal leader from whom our WPB members, mentees, students and guests can learn," says June Henton, College of Human Sciences dean. "She truly reflects the Women's Philanthropy Board's commitment to providing educational and philanthropic activities which support the WPB's mission of developing and fostering leadership."

Helping underwrite the event were Women's Philanthropy Board corporate partners Alabama Power, Moore Wealth Management, AU Office of Outreach, The Hotel at Auburn University and Dixon Conference Center, Citi Smith Barney, Blue Cross and Blue Shield and the Flower Store.

AU's Interior Design Program Gets High Marks

Recent rankings and reviews place Auburn's interior design program among the best in the nation.

The program, which is in the College of Human Sciences' Department of Consumer Affairs has earned reaccreditation from the Council for Interior Design Accreditation for a maximum term of six years and currently is ranked fourth nationally among CIDA-accredited programs by Design Intelligence Magazine. That's up from seventh nationally in 2007. The ranking is based on employers' evaluations of the performance of recent interior design graduates.

In addition, in the past five years, 100 percent of the program's graduates who have taken the National Certificate for Interior Design Qualification exam have passed both sections of the exam on their first attempt.

College of Sciences and Mathematics

Stewart W. Schneller, Dean 334-844-5737

www.auburn.edu/cosam



TIPS FOR SUCCESS—Students from Wetumpka High School sit with their teacher and listen to the panel discussion at the 2008 Society of Women in Sciences and Mathematics symposium.

Symposium Features Successful COSAM Alumnae

Five Auburn University College of Sciences and Mathematics alumnae who have bridged the occupational gender gap and built highly successful careers in scientific and mathematical fields shared their experiences with high-school girls during the Society of Women in Sciences and Mathematics' third annual leadership symposium held in late August.

The society, a philanthropic group in the College of Sciences and Mathematics, holds the symposium to showcase distinguished women in the fields of sciences and mathematics and to encourage young women to pursue career paths in sciences and mathematics.

Following the theme "A Nontraditional Journey," the one-day symposium began with a panel discussion featuring four of the COSAM graduates, who gave a short overview of their academic backgrounds and career choices and highlighted the opportunities that exist for women in various fields.

The panelists were Amanda Savrda, a master's student in geology at the University of South Carolina who is to be part of an international team of geoscientists studying global climate change through time as part of a National Science Foundation Office of Polar Programs—supported project; Carma Cook, a postdoc cancer researcher with the Carver Foundation at Tuskegee University who plans to pursue a career in that field; Rosemary Greaves, financial and risk analyst of potential Southern Company acquisition opportunities for Southern Company and manager of a group that develops long-term resource and financial plans for Southern Power Company, a Southern Company subsidiary; and Dr. Jennifer Wright, a commander in the United States Public Health Service and currently director of a Centers for Disease Control and Prevention study for a large post-licensure clinical trial to assess the only licensed anthrax vaccine available in the U.S.

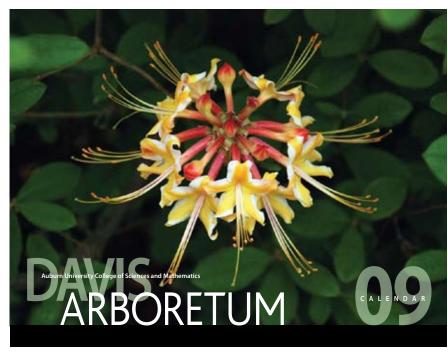
The panelists wrapped up their discussion by fielding questions from the audience, which included female students from five area high schools.

The fifth COSAM alumna, Katherine L. Seley-Radtke, was keynote speaker at the symposium luncheon. She is associate professor of chemistry and biochemistry at the University of Maryland, where her research focuses on drug discovery and development. She also is one of the U.S. State Department's Jefferson Science Fellows and works closely with the U.S. departments of Defense and Health and Human Services on the U.S./Russian effort toward the nonproliferation of biological weapons.

Marie Wooten, COSAM associate dean and organizer of the event, says the symposium fulfilled its goal of increasing teen girls' awareness of the many nontraditional career opportunities females have in the fields of science and mathematics.

"It's important to showcase women with whom girls can identify as role models for them to feel comfortable with that particular field as a career choice," Wooten says. "Our speakers were engaging, motivational and inspiring."

For more information about the Society of Women in Sciences and Mathematics, please visit the Web site at www.auburn.edu/cosam/swsm.



A YEAR IN THE ARBORETUM—Enjoy the sights of the Davis Arboretum throughout the year by purchasing a 2009 Arboretum Calendar. The calendar features photos of the many plants, trees and wildlife through every season, capturing the hidden and not so hidden treasure of the Arboretum. The calendar also features photographs entered in the 2008 Arboretum Photo Contest, representing the "spirit" of the Arboretum. The calendars are just \$10 each; and proceeds support special projects and development of the Arboretum's diverse native collections. Calendars are available at several retail locations in downtown Auburn, or contact the Arboretum at 334-844-5770 or e-mail the staff at arbinfo@auburn. edu to purchase your calendar.

School of Forestry and Wildlife Sciences Richard Brinker, Dean 334-844-1007

www.sfws.auburn.edu

NASA-Funded Study To Focus on Monsoons

An ecology professor in Auburn's School of Forestry and Wildlife Sciences has been awarded a \$1 million grant from the National Aeronautics and Space Administration to study how changes in land cover and land use in southern and eastern Asia will impact the monsoons there.

"This area is controlled by monsoon climate, which is of crucial importance to Asia mainly because it brings the rains that support human life, plants and animals," says Hanqin Tien, principal investigator of the study. "Land cover and land use changes are expected to have significant impact on the variability and intensity of the Asian monsoon."

Monsoons are seasonal reversals of wind direction caused by temperature differences between land and sea. Monsoons are accompanied by heavy rains that provide water resources to Asian countries in the summer.

Working with Tien on the monsoon project are scientists at Georgia Tech, MIT, the Marine Biological Laboratory and START, an international research organization that studies global change. The team is collaborating with scientific institutes in China and Japan.

Tien's goals are to understand the interaction that land-use changes such as urbanization and deforestation have on ecosystems and climates.

Armstrong Top Wildlife Conservationist

Jim Armstrong, wildlife sciences professor in the School of Forestry and Wildlife Sciences and Extension wildlife specialist, has earned the Alabama Wildlife Federation's 2008 Wildlife Conservationist of the Year award from the Alabama Wildlife Federation.

He is one of 14 conservationminded individuals or groups honored by AWF in this year's Governor's Conservation Achievement Awards, the most prestigious conservation awards in the state.

Armstrong's research and Extension efforts focus primarily on wildlife damage management and—especially as subdivisions increasingly expand into wildlife territory—wildlife/human conflicts. As he often



Armstrong

stresses to his students, wildlife management is "90 percent people management and 10 percent wildlife management."

The award Armstrong received was established to recognize individuals, professionals or groups whose outstanding wildlife resource conservation efforts demonstrate commitment and leadership.

College of Veterinary Medicine

Tim Boosinger, Dean 334-844-4546 www.vetmed.auburn.edu

Givens New Animal Research Coordinator

M. Daniel Givens, an associate professor of pathobiology and clinical sciences at Auburn's College of Veterinary Medicine, now also has been appointed coordinator of Animal Health Research, a unit of the College of Veterinary Medicine and the Alabama Agricultural Experiment Station.

Givens succeeds David A. Stringfellow in the coordinator position. Stringfellow, an epidemiology and microbiology professor at the vet school, retired in June after 25 years with Auburn University. At a conference in Kyoto, Japan, in 2007, the International Embryo Transfer Society presented Stringfellow its Distinguished Service Award in recognition of his research in advanced re-



DUAL ROLE—Vet school associate professor M. Daniel Givens, whose research focuses largely on large-animal reproduction and advanced reproductive techniques, is the new animal health research coordinator for his college and the AAES

productive technologies in food-producing animals.

Givens, whose research interests also focus on animal reproduction and advanced reproductive techniques, credits Stringfellow with creating the infrastructure on which the program was built.

The research Givens and other vet school faculty conduct in Sugg Laboratory involves methods to ensure that imported and exported cattle are not infected with disease and that bovine embryos do not contain infectious viruses.

Biofuel By-Product Shows Promise on Crops

Record-high prices for petroleum-based diesel have fueled an explosion of growth in the biodiesel industry. As of January, 171 biodiesel plants in the U.S. had the capacity to produce 2.24 billion gallons annually, and estimates are capacity will increase to 3.47 billion gallons by year's end.

But increased production of this clean-burning diesel-fuel replacement that's made from natural oils and fats has flooded the market with crude glycerin, the main by-product of biodiesel production.

In the past, biodiesel plants have been able to sell the glycerin for profit, but the surplus now has some plants paying to dispose of it.

Finding profitable, value-added uses for crude glycerin has grabbed the attention of scientists worldwide, including AAES scientist Rod Rodriguez-Kabana at Auburn.

Kabana is a nematologist who long has worked to develop alternatives to methyl bromide, a now-banned fumigant growers relied on for years to control soilborne pests, such as nematodes, and diseases.

Now, he and co-investigators may have found a highly effective alternative, in the form of crude glycerin. Using crude glycerin both alone and blended with commercial fertilizers, he has developed formulations that, when injected into the soil at varying rates, perform extremely well in controlling weeds and crop-destroying nematodes.

Because crude glycerin is considered a natural substance, Kabana says it could be used in organic farm production. He also expects that some of the crude-glycerin formulations will be on the market within three to five years—a very short time compared to the time it takes a non-organic pesticidal compound to get registered.

AU Study Helps Milo's Market Used Tea Leaves

The Winter 2008 issue of Ag Illustrated included an article about a Milo's Tea–funded study that Auburn horticulturists Jeff Sibley and Daniel Wells were conducting. Their mission: to determine whether the 15 tons of spent tea leaves the Bessemer-based company pays to dispose of each week could be put to use, perhaps in the nursery business.

The AAES scientists discovered that the tea leaves, when mixed with pine bark, make an outstanding plant-



NEW USE—Auburn horticulture research had shown that used tea leaves are a top-notch amendment to planting mixes.

ing medium for container-grown ornamentals.

Milo's shared the study results with Scotts Miracle-Gro and in June began shipping tea leaves to Scotts' Vance plant. Scotts is conducting its required tests and says Milo's tea leaves should be part of the Miracle-Gro mix soon.

Pate named E.V. Smith director

College of Ag alum Greg Pate, who earned his bachelor's in agronomy and soils in 1991 and his master's in the same in 1996, has been named director of the E.V. Smith Research Center in Shorter.

Pate brings both public- and private-sector experience to the position. In his first job out of college, he worked as a soil scientist with the U.S. Department of Agriculture, then moved to Mississippi to work as district manager for Deltapine Seed Agronomic Services. In 1999, he returned to Alabama as gin manager for the Milstead Farm Group Cotton Gin in Shorter, and he stayed there until June 2006, when he landed a job with Auburn as associate director of the Farm Services Unit at E.V. Smith.

Pate succeeds Jim Bannon, who began his stint as E.V. Smith superintendent in 1989 and was based there until 1999, when he was promoted to director of all the AAES's outlying units and moved to Comer Hall. Since that time, however, he had continued to manage E.V. Smith via cell phone calls and visits.

Bannon says Pate is a forward-thinking individual who, since joining the E.V. Smith crew in 2006, has implemented several positive changes in cropping systems, management and interaction with the farming community. Pate assumed his new role July 1.



KNOCK 'EM DEAD—Drops of a component of cinnamon oil are applied to German cockroaches that have been briefly anesthetized. The insects then are enclosed in plastic containers and monitored hourly for eight hours and then again at 24 hours to determine how long a component takes to kill and at what doses.

Aromatic Oil Components Kill Filthy Cockroaches

An AAES-funded study headed by AU entomologist Art Appel could one day give us highly effective weapons against the lowly, filthy, seemingly invincible German cockroach.

At the heart of the project are components and essential oils that carry the distinctive aromas of plants.

Appel and team are evaluating how effective components of a dozen different essential oils that are applied in varioous dosages are at killing and/ or repelling cockroaches and then ranking them accordingly. Then they will begin creating them.

Such research should yield commercial German-cockroach-killing products in the relatively near future. And since the essential oil components included in the study are non-toxic to humans and pets, these insecticides could be applied in sensitive areas, namely, kitchens.

Sand Mountain Poultry Litter in the Black Belt?

Chicken litter is a top-notch, low-cost fertilizer that for years, in heavy poultry-producing parts of the state, has been applied over pastureland and forage crops in order to enrich the soil with nitrogen, phosphorus, potassium and other key nutrients litter contains.

But on Sand Mountain, where poultry farming is big, the volume of litter produced can surpass local farms' needs. Hauling loads of litter to farms farther away, however, is cost-prohibitive. Thus, repeated applications to Sand Mountain fields and pastures over the years have led to phosphorus buildup that can be carried by runoff into rivers and streams, possibly creating water-quality issues that threaten the future of poultry industry there.

Meanwhile, in the Black Belt, the problem is the direct opposite. Lack of nutrients in soil and poor soil fertility in pastures, hayfields and cropland are key causes of the region's depressed farm economy. If only Black Belt farmers had Sand Mountain's surplus chicken litter.

Using a systems approach, an AAES research team that includes AU biosystems engineers, agronomists, animal scientists and entomologists is on the verge of making that happen.

They have devised a way, using slightly adapted existing farm equipment, to densify poultry litter into bales that double the volume of litter a truck can haul. They also have developed guidelines for transporting and storing the densified litter; a GPS-based transportation analysis system to connect the haves with the have-nots; and strategies for optimal on-farm use of poultry litter. Field days will be conducted soon to share the findings with producers.

Fishing for a Brighter Future in West Alabama

By Katie Jackson

West Alabama's Black Belt region is one of the poorest parts of the state, but it also is an area full of potential economic opportunities, thanks in part to the efforts of Auburn University fisheries and allied aquaculture scientists.

Auburn research and extension experts began working in the Black Belt more than 25 years ago and were primary players in the development of the U.S. catfish industry. In Alabama alone, that industry has grown from a few farm ponds in the 1960s to 25,000 acres of commercially farmed ponds that annually yield some 175 million pounds of fish worth about \$150 million at the farm gate. The regional financial impact of the catfish industry at all levels has been estimated at more than \$1 billion.

Needless to say, the catfish industry is an integral and essential part of the local and regional economy, but global competition from imported fish products and ever-increasing production costs threaten its sustainability.

For those reasons, Auburn aquaculturists are searching for more costeffective ways to grow, process and market high-quality catfish and also are exploring options for new fish products and species that can be grown in Black Belt waters.

Jesse Chappell, assistant professor in the fisheries and allied aquaculture department and an Alabama Cooperative Extension System aquaculture specialist, is helping lead that effort through Auburn University's Agriculture Initiative, a program designed to help sustain and expand west Alabama's aquacultural economy . The initiative is funded in part by AU, the Alabama Legislature, private growers, the Alabama Catfish Producers, the National Oceanic and Atmospheric Admnistration's Sea Grant program and the U.S. Department of Agriculture.

"The catfish industry has to become more efficient to compete globally, and that requires a paradigm shift," says Chappell. "Because increased competition has reduced profit margins, it's no longer just about how many fish you can pull out of a pond, but rather how you can do it more cost effectively and efficiently to compete in a global arena."

Options For Efficiency

With that in mind, Chappell and other aquaculturists working in the Black Belt are exploring a wide range of freshwater fish production efficiency options—from growing fish in outdoor raceways and indoor production systems in "greenhouses" to better feeding strategies, farm management and marketing systems for catfish to growing marine fish species in Black Belt salty-water ponds.

"We are trying to use the existing infrastructure to improve production efficiency and ultimately upgrade farm profitability," Chappell says.

Among the ideas they are exploring is the use of in-pond raceways—structures placed within outdoor ponds that confine similarly sized fish in groups where they can be managed more intensively and efficiently. This system helps growers get a better handle on fish inventory and on how their fish are performing and offers ways to easily segregate and grow new species, such as striped bass, red drum and tilapia, in the ponds.

"Farmers can raise an average of 6,000 to 7,000 pounds of fish a year in a typical Alabama production pond," says Chappell. "Using the raceway production approach, they can raise three times that amount in the same pond with greater feed efficiency, survival and managerial control. Our aim is not to just produce more fish but to do it at less cost per unit."

Another option is growing fish indoors in greenhouse-like structures that allow farmers to produce high-value warm-season species, such as tilapia, in a year-round production approach while also reusing nutrients and water routed from fish tanks through a greenhouse plant production system.

"A simply designed indoor system that is being demonstrated at the E.W. Shell Aquaculture Experiment Station in Auburn has the potential to produce tilapia at 350,000 pounds per acre per year," says Chappell.

The greenhouse system offers farmers a double-cropping option. They can grow fish along with ornamental plants such as ferns, lotus and daylilies as well as food plants such as tomatoes, strawberries and other plant crops in an adjoining greenhouse that uses recycled water from the fish production to irrigate and provide some nutrients needed by the plants.

Salinty A Boon

Another focus of AU's Black Belt work is the production of new species in the region's unique waters. Some Black Belt wells yield water higher in salt content than most fresh waters in the state or region. This saltier water can be a major asset for catfish farmers who manage the salinity to keep their fish healthy. But, it can also be a boon to pond owners willing to explore the commercial production of a variety of saltwater seafood species tolerant to low salinities.





EARNING THEIR STRIPES—Hybrid striped bass, pictured at top, is just one of many species of fish being tested for production in Alabama's Black Belt region. Jesse Chappell, an assistant professor of fisheries and allied aquacultures at Auburn, pictured in the lower photo on the right, has been leading the effort to boost the Black Belt aquaculture industry.

In an effort to tap into that market, researchers are exploring ways to grow shrimp and other marine food fish in Black Belt ponds. Their efforts have already paid off for some farmers who have found shrimp production to be a commercially viable enterprise.

Currently there are four growers producing about 300,000 pounds of shrimp each year in their ponds. Other species suitable for food production, such as red drum, flounder and hybrid striped bass, are still in research and demonstration stages. Marine bait fish such as bull minnows and croaker, which can be sold to sport fishing markets along the Gulf Coast, are also being evaluated for pond production in the Black Belt ponds.

In addition to exploring these new aquacultural options, AU researchers are also looking for ways to better market the staple fish of the area—channel catfish. A new marketing effort currently called the Blue Star Program is under way to improve quality, service and value of catfish labeled with the Blue Star brand. Blue Star-labeled catfish must meet stringent production and processing quality standards for taste, food safety and other quality assurance factors in order to earn the label, which means these fish can be sold at a higher price than fish imported from Asia.

purely academic

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 Dave Williams, interim associate dean for instruction, at 334-844-2345 or visit www.ag.auburn.edu/.



ONE BIG BASH—Nicole Taylor, left and sister Sarah of Birmingham pose for a picture with Auburn University equestrian team members Bailey Dymond, second from left, a sophomore majoring in animal sciences, and Jessica Braswell, an agricultural economics senior, during the Greater Birmingham Area Auburn Club's fall kickoff. With the club's spotlight this year on the College of Agriculture, the equestrian team members were on hand to highlight the unique partnership between the Department of Animal Sciences and Auburn Athletics.

Ag in Spotlight at B'ham Kickoff

By Amy McDaniel

Senior, Animal Sciences/Production

Strains of the Auburn fight song could be heard through the halls and among the exhibits at the McWane Center in Birmingham in mid-August when the Greater Birmingham Area Auburn Club held its annual fall kickoff. That evening at the center, science took a backseat to Auburn football fever.

Each year at the kickoff, the club shines the spotlight on one AU college or school, and this year, the College of Agriculture was the star. Featured were members of AU's national championship equestrian team, who were dressed to the nines in their show outfits and posed for pictures with attendees, and a child-friendly grass plot the Department of Agronomy and Soils used to show the different types of grasses in the Southeast, including the turfgrass used on Pat Dye Field inside Jordan-Hare.

Music by the AU band, antics from Aubie, recognition of past quarterbacks and a pep talk by Coach Tommy Tuberville rounded out the evening. And when all club members left the center, they were ready for some football

Outdoor U Returns to Campus Oct. 30

Whether you fish, hunt, camp, ski, bird-watch or just like being outside, you can immerse yourself in all things outdoors Thursday, Oct. 30, from 9 a.m. to 3 p.m. at AU's second annual Outdoor U.

The event, cosponsored by the College of Agriculture and the School of Forestry and Wildlife Sciences, is a day to explore outdoor careers and technology through displays that will be located on the lawn just outside Jordan-Hare Stadium.

Among the exhibits will be displays by area outdoor vendors and governmental and nonprofit natural resource and conservation organizations, along with various AU colleges, departments and organizations. All exhibits highlight out-of-door ca-

NO FEAR—A student from an area high schoool proves his manliness by letting a snake curl around his neck at last year's Outdoor U. Good thing it was just a friendly corn snake.

reers, extracurricular and recreational opportunities available to students and area residents. Displays and programs featuring fish, raptors and other wild creatures are also on tap.

"The event began last year when Outdoor Life magazine picked Auburn as one of the top 10 schools to attend if you wanted a degree that would let you work outdoors," says Deborah Solie, student recruiter for the College of Agriculture and one of Outdoor U's organizers.

The magazine went on the road to visit some of the schools, and one of the tour stops was Auburn. The College of Agriculture and the School of Forestry and Wildlife Sciences hosted the event, which drew some 700 AU and area high-school students.

Doug Phillips, host of Alabama Public Television's Discovering America, will set the stage for Outdoor U the evening before the event, when he speaks as the Fall 2008 E.T. York Distinguished Lecturer. His presentation is set for 7 p.m. Oct. 29 in the School of Forestry and Wildlife Sciences conference hall, Room 1101. He also will be on hand the following day at Outdoor U.

"We're really excited that Outdoor U is becoming an annual event," Solie says. "It is a great way to spread the word about outdoor-related opportunities at Auburn and beyond."

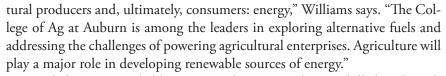
Admission to Outdoor U and the lecture is free and open to all current and prospective AU students as well as the general public. For more information, contact Solie at 334-844-8900 or das0002@auburn.edu or Katie Jackson at 334-844-5887 or smithcl@auburn.edu.

AU's Expo Exhibits Focus on Energy in Ag

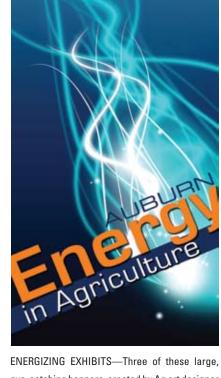
When Dave Williams learned that the overall theme for Sunbelt Ag Expo 2008 was "New Crops and New Methods for a Changing World," the AU College of Agriculture's interim associate dean and Sunbelt Expo exhibits organizer did some thinking outside the box. The result was a collection of College of Ag exhibits focused on one topic: Energy in Agriculture.

So when visitors to the mid-October expo in Moultrie, Ga., stopped by Auburn's display area, they got up-close looks at power generation using AU's mobile gasification unit, the carbon footprint of poultry production, energy input in closed fish production systems, comparisons of biofuel feedstocks' energy output, and energy conservation practices in the landscape.

"We wanted to showcase what Auburn is doing for one of the top areas of interest to today's agricul-



Sunbelt Ag Expo, held every October in Moultrie, is billed as "North America's Premier Farm Show" and has garnered a reputation throughout the nation for having the latest in farm technology on display. Auburn University's College of Agriculture is a long-time participant in the expo.



ENERGIZING EXHIBITS—Three of these large, eye-catching banners, created by Ag art designer Stacy Wood, hung over the college's display area at this year's Sunbelt Ag Expo in Moultrie, Ga.



DOING HIS PARENTS PROUD—Chuck Dowling, center, a College of Ag senior from Dothan who is majoring in agronomy and soils, stands with his parents, Charlie and Debbie Dowling, following the College of Agriculture's annual Scholarship Recognition Program in mid-September. More than 150 students, faculty, donors and parents attended the annual program this year. Traditionally held on a weeknight at the Hotel at Auburn University and Dixon Conference Center, this year's program was on a Saturday morning at Ham Wilson Livestock Arena and, instead of punch and cookies, featured a brunch. This was a record year for the College of Agriculture's scholarship program, with \$717,607 awarded to 232 students. Dowling received the William H. Smith Endowed Scholarship, the R.Y. Bailey Endowed Scholarship in Water and Soil Conservation and the Southern Seed Certification Association Scholarship.

Prospective Transfer Students Visit Open House

More than two dozen college students currently enrolled in other universities but considering transferring to Auburn to major in agriculture attended the College of Agriculture's first-ever Transfer Student Open House in early September.

The event, which was open to students and parents, provided information on transfer requirements, scholarship opportunities and careers in agriculture and natural resources. Students also had the opportunity to meet with faculty and tour the college's facilities.

Student Services coordinator Deborah Solie says the open house was designed to reach out to the large number of transfer students the college has each year.

During the half-day program, the prospective students visited each department in the college and learned the ins and outs of the admissions process at Auburn, including key contact names that could come in handy during the transfer process and even after they are AU students.

"Students are our first priority," Solie says. "We want to make sure they know who we are and are comfortable calling on us for help."

Plans are in the works to offer possibly two Transfer Student Open Houses a year, in spring and in fall. For updates on the schedule, go to www. ag.auburn.edu/goplaces/events and click on Transfer Student Open House, or contact Solie at das0002@auburn.edu.



TAKING A BREAK—Tired and sweaty from moving new College of Ag freshmen from their homes back home to their new places in Auburn, the students and their families take five to enjoy a great picnic lunch under shade trees on Comer Hall's front lawn. The picnic was cohosted by the office of Student Services and the college's Parent Council.

First Moving Day Picnic a Big Success

By Amy McDaniel

Senior, Animal Sciences/Production

This year's incoming freshmen were introduced to the family atmosphere that is the hallmark of AU's College of Agriculture when the Student Services office and the college's top-notch Parent Council hosted the college's first-ever Moving Day Picnic.

Held the Saturday before fall classes began, the picnic featured pulled pork, homemade cookies and Toomer's lemonade and gave the new students and parents the chance to meet and talk with current students, faculty and Parent Council members about college life.

Elaine Ridgway of Auburn, whose son Spenser is a sophomore in animal sciences/pre-vet, said the picnic helped new students and their parents "know the students are not alone." It also gave them a chance to eat and just catch their breath, she added.

Jim Vanderford of Southside, whose son John is a senior in horticulture, dubbed the picnic a great idea that gave the newcomers the chance "to meet each other, fellowship a little bit and meet some of the folks in the College of Ag."

The new students said they appreciated the opportunity to meet other incoming freshmen.

"The Moving Day Picnic was a great opportunity because the college experience can be overwhelming at times," said ag communications major Justin Posey of Montevallo. "As a freshman, just seeing all the people around you and the welcoming faces, it gets you ready and excited to move in and start your classes at Auburn."



SEE-ING THE SIGHTS—SEE program students take a day off for a road trip to Montgomery. Here, they pause for a pose in front of the Southern Poverty Law Center. Ladarius Lane, the College of Agriculture's SEE student, is kneeling on the left.

College Hosts SEE Program's Lane

The College of Agriculture participated in a new program this summer called the Summer Enrichment Experience. Hosted by the Office of Diversity and Multicultural Affairs and aimed at increasing minority enrollment at Auburn, SEE is an intensive four-week program for underserved incoming freshmen who will be majoring in agriculture, business, forestry, education, human sciences, nursing or architecture, design and construction.

The 36 students chosen to participate this year took two non-credit classes designed to prepare them for freshman calculus and English courses in the fall. Each course had a parallel workshop supplementing classroom instruction. Auburn faculty members taught the classes; graduate students supervised the workshops.

Ladarius Lane of Woodland, an incoming freshman majoring in animal sciences with a pre-veterinary option, was the College of Ag's SEE student. Lane successfully completed the SEE program, received a diversity-aimed Provost Leadership Undergraduate Scholarship and is now well into his freshman year. He is a member of the College of Agriculture learning community.



RELIEF ADE—Student Services specialist Megan Ross proves she's filled so many paper cups with lemonade, she now can tell when the cup's full without even looking. She was among the Student Services staff members who, on the first day of classes for fall semester 2008, spent three hours serving students free cookies and lemonade in front of Comer Hall. The College of Agriculture's Lemon-Aid for Students event was part of AU's Welcome Week, a week packed with dozens of events campus-wide to welcome new and returning students to campus for fall semester. Members of the Student Services office say that the cookies-and-lemonade event was so successful, students should expect a few random encores this semester on Ag Hill.

alumni & development

In Memoriam

In late summer, the College of Agriculture family lost three individuals who, through the years, gave of themselves and their resources to serve and support the college.

Martha Shelton Smith of Auburn, a long-time assistant to College of Agriculture deans and Alabama Agricultural Experiment Station directors, died Aug. 29, 2008, in Auburn. She was 71.

Jack Smith, a retired Alabama Cooperative Extension Service editor, says his wife of 50 years worked in the College of Ag from the early 1970s until her retirement in 2000.

"She loved her job, and she loved the College of Agriculture," he says.

In addition to her widower, she is survived by son Michael (Lynn) Smith of Atlanta; her mother, Hilda Shelton of Moulton; two granddaughters; two sisters; and two brothers.

William R. Gill, 88, of Auburn, a man often considered the "father of soil dynamics" and known, too, as a major AU Department of Biosystems Engineering benefactor, passed away Sept. 2, 2008, after a long illness.

The Pennsylvania native was a veteran of both World War II and the Korean War. He earned a B.S., M.S. and Ph.D. in agronomy from Penn State, University of Hawaii and Cornell University, respectively.

He worked for many years as director of USDA's National Tillage Machinery Laboratory in Auburn and an adjunct professor for what was then the Department of Agricultural Engineering at Auburn. In 1982, troubled by the lack of female students in the field of ag engineering, he and his wife began directly giving annual scholarships to females in the major. In 1999, they established the Irene and William Gill Endowment for Scholarships in Agricultural Engineering. The fund was started with their initial gift of \$25,000, but with their continued contributions through the years, the endowment now tops \$400,000. To date, some 75 women in biosystems engineering have benefited from the Gills' generosity.

He is survived by five sons, one daughter and six grandchildren.

Memorials can be made to the Irene and William Gill Endowment for Scholarships in Agricultural Engineering, Office of Development, 317 S. College St., Auburn, AL 36849.

Claude Henry Moore, who for 27 years served as head of the College of Agriculture's Department of Poultry Science, died Sept. 13, 2008, in Auburn. He was 75.

Moore earned his undergraduate degree in agriculture from Auburn, his master's from Kansas State University and the Ph.D. in genetics from Purdue University. He began his tenure at Auburn in 1956 and three years later was head of poultry science. In 1986, he was selected to be associate director of the Alabama Agricultural Experiment Station. When he retired in 1989, he was appointed emeritus professor of poultry science.

He was a charter member of the Agricultural Alumni Association, a Fellow of the National Association for the Advancement of Science and a member, president and Fellow of the national Poultry Science Association. The Alabama Poultry and Egg Association elected him to the Poultry Hall of Fame in 1998.

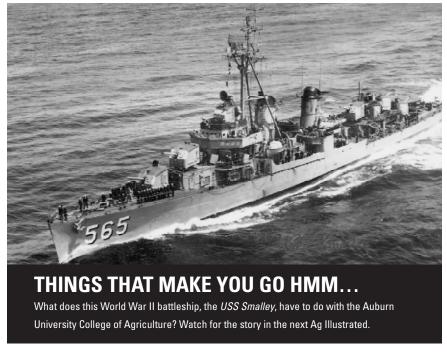
Survivors include his wife, Mary Virginia, five children and their spouses and 13 grandchildren.



RESEARCH EXPERIENCE — Poultry science assistant professor Omar Oyarzabal stands with Amanda Holley, center, from Columbus State University, and Oklahoma City University student Brenda Rodriguez, two of 10 undergraduates from other colleges and universities who spent 10 weeks of their summer at Auburn, getting hands-on experience conducting research. The visiting students were at AU as part of a new, three-year Research Experiences for Undergraduates Program at Auburn that is funded by a National Science Foundation grant. Oyarzabal, who was instrumental in getting the grant, heads the program. Faculty members from several colleges served as mentors for the students, whose research focused on sensor and biosensor development. Holley and Rodriguez, whom Oyarzabal mentored, worked to create single-stranded DNA for identification of *Campylobacter jejuni* bacteria using an optical sensor.



ANOTHER FIRST—Special guests at a late summer Auburn University Campus Club meeting included, from left, Auburn University horticulture major Kate Williams, Ann Pearson of Auburn and horticulture professor Jeff Sibley. The three were there for the official announcement of the First Ladies' Endowed Scholarship in honor of the late Annie Smith Duncan. She was the wife of Luther N. Duncan, president of what then was Alabama Polytechnic Institute from 1935 to 1947. The \$25,000 gift to the AU Campus Club First Ladies' Endowed Scholarship that established the scholarship in Mrs. Duncan's name was made by Pearson and her cousin, Robert Smith Duncan Jr. of Nashville, both grandchildren of the Luther Duncans. The Campus Club created the endowment in 2005 to award scholarships to deserving horticulture majors at Auburn. In the three years since it has grown to \$260,202. The first Annie Smith Duncan First Ladies' Endowed Scholarship was awarded to Williams, a senior.



Orr Golf Classic Nov. 13 at FarmLinks

Attention golfers: The sixth annual Henry P. Orr Memorial Golf Classic will be Thursday, Nov. 13, at FarmLinks Golf Club at Pursell Farms in Fayetteville. The tournament has a 10 a.m. shotgun start. At 3:30 p.m., team and individual awards will be presented, followed by a rib-eye dinner.

The registration fee is \$250 per person, and that covers the golf game (of course), along with the cart, driving range, a boxed lunch, a social, tee prizes and the steak dinner. All proceeds support the Henry P. Orr Endowed Fund for Horticultural Excellence at Auburn University, a fund that sponsors a seven- to 10-day international study tour annually for a small group of outstanding horticulture majors and a faculty member.

Orr, who was a horticulture professor at Auburn from 1947 until 1981, was a strong proponent of taking students "beyond the classroom" in order to expose them to new ideas and broaden their perspectives.

Deadline to register for the Orr Classic is Friday, Nov. 7. For more info or a registration form, contact Katie Hardy in the college's development office at 334-844-1475 or hardyke@auburn.edu.

Ag Alums Ready to Cruise for a Cause

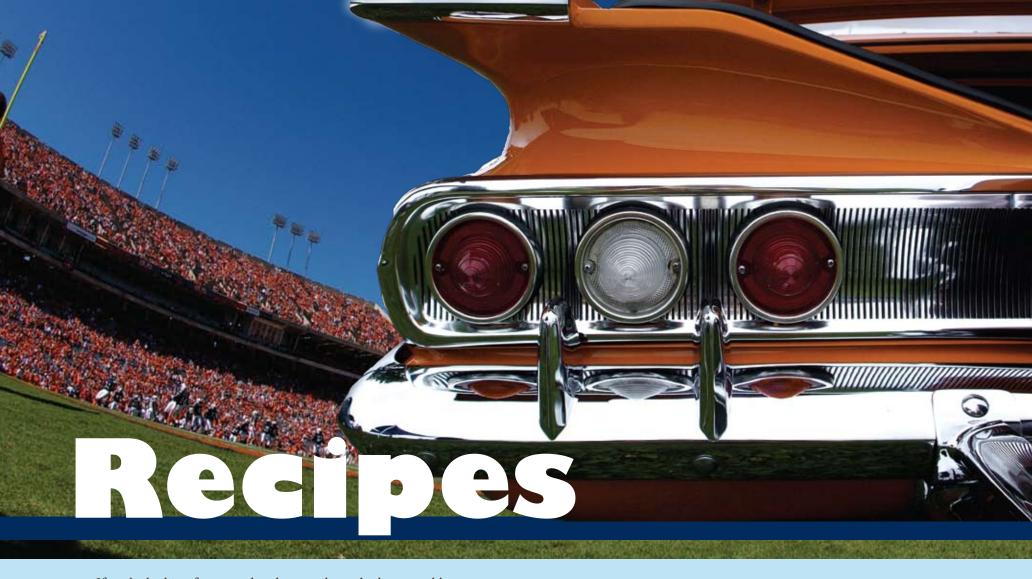
Where can you get a good deal on a great getaway, and all to help support a fantastic cause? On the second annual AU College of Agriculture alumni and friends' cruise for a cause, of course.

The cruise aboard Carnival's *Fascination* will set sail Monday, March 2, from Jacksonville, Fla., for five glorious days at sea, with stops at Key West and Nassau, Bahamas. All that, for rates ranging from \$396 to \$606 per person, depending on accommodations and number of guests per cabin.

Just as was the case with last year's cruise, a portion of your fare, along with matching dollars from Carnival Cruise Lines, will benefit the AU College of Ag's scholarship program. Last year's cruise raised \$2,548.

To find more about the cruise, go to www.kytravels.com and click on "Alumni Cruise." Only a limited number of cabins are being held, so act now. The last possible day to register, should cabins still be available, is Dec. 19.

Contact Katie Hardy at hardykc@auburn.edu for more details.



If you're looking for more than burgers, brats, barbecue and beer at your next tailgate party, check out this assortment of game-day recipes submitted by randomly selected College of Ag faculty and staff. For starters, poultry science financial associate Kim Fleming shares her quick and easy formula for Black-Eyed Pea Salsa. On the sandwich side of things, we have Italian Tailgate Sandwich, an original from horticulture associate professor Amy Wright, and Smoked Turkey & Slaw Sandwiches, a favorite from Walt Prevatt, agricultural economics professor and Extension specialist. And, from Ag Hill jokester and in-demand information technology guru Scott Snyder, there's Snyder's Famous Beef Chili. OK, so "famous" may be a stretch, but those who have been privileged to sample it say this recipe's definitely a keeper.

Black-Eyed Pea Salsa

- 1 (16-ounce) can black-eyed peas, drained
- 1 (15-ounce) can black beans, drained
- 1 (11-ounce) can white corn, drained
- 1 1/3 cups medium salsa
- ½ cup chopped green onions
- 34 cup chopped green pepper
- 1 small can chopped black olives, drained
- 1 jalapeno pepper, seeded and chopped
- 1 envelope of Italian salad dressing mix
- 1 teaspoon ground cumin
- 1 teaspoon garlic powder
- Tortilla chips

Blend together all ingredients except chips. Serve with tortilla chips.

Italian Tailgate Sandwich

- 1 large loaf French bread from deli
- 1 jar green or black olive tapenade
- ½ pound hard salami, sliced
- 1 (3-ounce) package prosciutto, sliced
- ½ pound provolone cheese, sliced
- 1 jar roasted red peppers, drained
- 1 (16-ounce) can quartered artichoke hearts, plain or marinated
- 1 package fresh basil leaves, stems removed
- 1 tablespoon capers
- Extra-virgin olive oil
- Balsamic vinegar
- Fresh cracked black pepper

Slice the bread horizontally to form two long halves. Scoop a portion of the bread from the center of each half to form a "boat" in each half. On the bottom half of bread, spread the olive tapenade, then layer the salami, prosciutto and cheese on top of the tapenade. Top the meat and cheese with roasted red peppers, artichoke hearts, basil and capers. Dress top half of the bread with oil, vinegar and black pepper; fit top half over bottom half. Press the whole sandwich down firmly from the top, then wrap the whole sandwich very tightly in plastic wrap. Sandwich is best if prepared 2-3 hours before serving to let the flavors blend; store in refrigerator if necessary. At the tailgate, slice the sandwich into $1\frac{1}{2}$ -inch sections and serve.

Smoked Turkey & Slaw Sandwiches

- 2 cups shredded green cabbage
- ½ cup thinly sliced onion
- 1/4 cup cider vinegar
- 1/8 teaspoon salt
- Pinch of cayenne pepper
- 1 tablespoon commercial barbecue sauce
- 1 tablespoon peach jam
- 1 tablespoon reduced-fat mayonnaise
- 4 whole-wheat rolls
- 12 ounces sliced smoked turkey
- 4 slices jalapeno jack cheese (or your preference)

Combine cabbage and onion in a medium bowl. In a small bowl, mix together vinegar, salt, cayenne pepper, barbecue sauce, peach jam and mayonnaise. Pour over cabbage and stir to blend well. Fill each roll with one-fourth of the slaw, 3 ounces of turkey and a cheese slice.

Snyder's Famous Beef Chili

- 3 tablespoons oil
- 2 medium onions, finely chopped (about 2 cups)
- 1 red bell pepper, chopped into 1/2-inch cubes
- 9 medium cloves garlic, minced or pressed through garlic press (about 3 tablespoons)
- ½ cup chili powder
- 2 tablespoons ground cumin
- 1 tablespoon ground coriander
- 1 teaspoon red pepper flakes (2 teaspoons if you like it hot)
- 1 tablespoon dried oregano
- ½ teaspoon cayenne pepper (1 teaspoon if you like it hot)
- 2 pounds ground sirloin
- 1 (15-ounce) can red kidney beans, drained
- 1 (28-ounce) can diced tomatoes, undrained
- 1 (28-ounce) can tomato puree
- Kosher salt

Heat oil in a large, heavy-bottomed Dutch oven (enamel-coated cast iron is best) over medium heat for about 3 minutes, or until hot but not smoking. Add onions, bell pepper, garlic, chili powder, cumin, coriander, red pepper flakes, oregano and cayenne pepper. Cook until vegetables start to soften and brown, about 10 minutes. Add half the beef, breaking apart with a wooden spoon, and cook 3-4 minutes or until browned. Add remaining beef and cook 3-4 more minutes or until browned.

Add beans, tomatoes, puree and about ¾ teaspoon salt. Bring to a boil; cover, reduce heat to low and simmer for 1 hour, stirring every 15 minutes. Remove lid and simmer, uncovered, for another hour, stirring occasionally. If chili begins to stick, add ½ cup water. Add salt if needed. Garnish each serving with any or all of the following: lime wedges, shredded cheese, cilantro, chopped red onion and sour cream.



Undergrads Work Hard as Volunteer Research Assistants

By Leigh Hinton

If it's true that the world is run by those who show up, then a group of undergraduate students in the College of Agriculture will be running the world one day because these students show up at all hours of the day and night.

The students are members of the pLacTeam, a group that is supporting a research project focused on porcine lactocrinology, or the study of biologically active factors in female pigs' milk. While other undergrads may be studying, sleeping or even partying, the 27 pLacTeam members have another priority: to give the best care possible to the sows and newborn pigs that are part of a three-year study funded by a highly competitive National Research Initiative grant from the U.S. Department of Agriculture.

The study is investigating the extent to which relaxin, a hormone that sows (and, in fact, many female animals including humans) produce during late pregnancy and pass to newborns that nurse immediately after birth, is required to ensure that the female offsprings' reproductive-tract tissues develop properly and function normally into adulthood.

When research involves living animals, relax'n is out of the question. In fact, "No Relax'n" is the self-proclaimed motto of the pLacTeam. To accomplish their research goals, team members often work around the clock, sometimes heading into an exam with very little sleep.

And there is plenty of work to keep them busy. The shifts at the AU Swine Research and Education Complex run 24/7, and it's not that unusual for someone to work the 2 to 6 a.m. shift and then take the 6 to 10 p.m. shift.

Since the main focus of the research during the summer of 2008 was the farrowing of piglets used in the relaxin research, these students kept vigil on the pregnant sows at the complex, checking on the status of the sows and preparing to assist when it was time for the piglets to be born.

Passels of Piglets

"A sow's milk contains the hormone relaxin," says team member Shelby Agnew. "Our job is to catch the babies when they are born because we don't want them to have the sow's milk right away."

Animal scientist professor Skip Bartol, co-principal investigator in the relaxin study with Carol Bagnell at Rutgers University, doesn't deny that the team works long hours.

"You can't schedule a delivery, so we have to have a team ready and in place around the clock," Bartol says.

A typical crew per four-hour shift includes at least two pLacTeam members plus Bartol and a graduate research assistant or two. To make sure all the pigs stay healthy and fit, all pLacTeam members begin their shifts by showering, putting on scrubs and getting their shift assignments from either Bartol

or Dori Miller, an original pLacTeam member and now a graduate student with Bartol.

"The pLacTeam program allows graduate students like Miller to gain both leadership experience and confidence in themselves and their technical abilities," says Bartol.

Agnew praises Miller's abilities. "She keeps it all together and gets whatever needs to be done so quickly, so easily. She really has the touch with the newborn pigs."

Once the farrowing starts, the newborn pigs must be collected before they get a chance to nurse. The female piglets are divided into four study groups, some of which get the sow's milk and some of which are handfed. Within these groups of piglets, some are given an extra dose of relaxin while others receive no relaxin at all. Ultimately, reproductive tract tissues are obtained and gene expression analyses are performed. Results should show how relaxin affects patterns of gene expression necessary for reproductive tract development and function in females.

The Opening Lecture

Bartol emphasizes that undergraduate volunteers must understand not only what they are doing but why. Therefore, all pLacTeam members are required to attend a lecture where he explains both the scientific and the technical skills needed.

Brian Anderson and Mike Carroll, who manage and oversee operations at the AU swine center on Shug Jordan Parkway, make sure that students learn to navigate around the facility safely and learn basic husbandry required to work with the animals.

"It's one thing to have someone who can carry out the technical aspects of the research," Bartol says. "It's quite another to have someone who can perform those skills and who also understands why she or he is doing it."

Members of the pLacTeam hail from Chicago, Manhattan, the West Coast and, of course, Alabama, Georgia and Florida. And, though most of them are animal sciences majors, there also are a few zoology majors and even an engineering student among them.

Agnew, one of those in animal sciences, says she volunteered for the team in 2006 after Bartol, as a guest lecturer in her orientation to animal sciences class, described the impact of animal science research in the 21st century and the role of the university in this research.

"I ask the students to think about what they want to do, not what they want to be," Bartol says "And, I tell them, it takes experience to know what you want to do."



Hands-On Experience

Experience was exactly what Agnew, who has wanted to be a veterinarian all of her life, needed, so after the class she e-mailed Bartol and asked if she could work in his lab. She washed laboratory glassware for the first semester. Then she began to help with the relaxin research, taking milk from the lactating sows (mama pigs) to see if it contained active relaxin.

Most of the other team members were recruited the following year when Bartol presented the same lecture to a new crop of students in the orientation class

Paul Rubinstein, an animal sciences major on the pre-vet track, was friends with Agnew, and she encouraged him to sign up for the pLacTeam.

Morgan Wallis, who received her bachelor's degree in zoology in August and currently is working toward certification as a high-school science teacher, earned her place on the team after working with Bartol in the AU Cellular and Molecular Biosciences program. In summer 2007, Wallis was a counselor for a group of high school students attending a National Science Foundation—supported summer science camp Bartol directed. She's been an active pLac-Team member ever since.

"You've got to be on your toes and ready," she says. "But then you have to sit and wait, then go out to the barn and check the sows, then come back to the break room and wait. I get anxious."

Rubinstein, who's from New York City, stayed in Auburn this past summer to take a class and work with the pLacTeam.

"We had a lot of baby pigs born and it was intense," he says. "We had about half the team here, but we still had to get stuff done."

Agnew says the farrowing process is simply amazing. Once the first piglet is born, the remaining 10 or 12 appear in rapid succession.

"You go from zero to 90," she says. "They come out fast."

An Impressive Group

When scientists at the College of Veterinary Medicine heard about this group of undergraduates—their dedication, skills and work ethic—they asked team members to help with other research projects.

Carl Pinkert, associate dean for research and graduate studies at the vet school, is one of those scientists who was impressed with the pLacTeam.

"I met some of these students during late night and early morning shifts on a research project at the SREC and was amazed by their still evident enthusiasm from midnight through 4 a.m. on a weekend night—and after a week's worth of work," he says.

During the summer, while taking classes and working with Bartol on the relaxin study, Rubinstein also worked at the vet school with Pinkert, assisting

with behavioral studies evaluating neurological and motor problems in genetically modified mice as models of human metabolic diseases.

"Being part of the pLacTeam has given me a lot of opportunities," Rubinstein says. "If I weren't part of the team, there's a lot of things I wouldn't have done. It's given me a broader sense of what research is about."

Agnew, too, has worked at the vet school with Jersey cows and sheep in the laboratory of Jim Sartin, anatomy, physiology and pharmacology professor.

"The world is run by those who show up, and these kids on the pLacTeam have definitely shown up," Bartol says. "They are dependable, eager and interested. They are becoming more knowledgeable and are all true assets to the university research community."

More to the Story

At the AU Pre-Vet Club opening meeting earlier this fall, one of the 2007-2008 pLacTeam members spoke about her experience on the team to students interested in learning more about opportunities for undergraduate pre-clinical training and research.

After the meeting, 31 new students signed up to join the 2008-2009 pLacTeam. Plans are under way to organize formal science training for the new students and to create a program involving broad undergraduate involvement in life science research.



calendar of events

Oct. 29 Fall 2008 E.T. York Distinguished Lecturer Doug Phillips 7 p.m. School of Forestry and Wildlife Sciences conference hall Room 1101 Auburn University Auburn

Doug Phillips is the host of APT's Discovering Alabama, an award-winning, Emmy-nominated documentary series about Alabama's rich natural history and heritage. The lecture is free and open to the public.

Contact: Bill Hardy at hardywe@ auburn.edu

Oct. 30 Outdoor U 9 a.m.–3 p.m. Next to Jordan Hare Stadium Auburn University Auburn

Outdoor U showcases careers that let you work in the great outdoors. The event features displays from private vendors and university organizations highlighting outdoor career and recreational opportunities. Outdoor U is free and open to the entire campus and to high-school groups.

Contact: Deborah Solie at das0002@ auburn.edu

Nov. 8 29th annual Taste of Alabama Agriculture and Fall Ag Roundup 9 a.m.—noon Ag Heritage Park Auburn University

Auburn

The College of Agriculture and the Agricultural Alumni Association host this Auburn homecoming day tradition, which features dozens of foods grown and/or processed in Alabama as well as exhibits, live music, children's activities and live and silent auctions. Admission is \$5 for ages 6 and up.

Contact: Elaine Rollo at 334-844-3204 or rollome@auburn.edu

Nov. 11-12

Sixth annual Alabama Organic Vegetable Production Conference Solon Dixon Conference Center Andalusia

Farmers, home gardeners, Extension agents and others interested in producing and marketing organic products are welcome to attend the event. Registration costs \$75. View the program and register at http://www/ag/auburn/edu/aaes/organicveg/.

Contact:: Jan at 334-844-2124

Nov. 13 Sixth annual Henry P. Orr Memorial Golf Classic 10 a.m. shotgun start FarmLinks Golf Club at Pursell Farms Fayetteville

Proceeds from this tournament in Talladega County support the Henry P. Orr Endowed Fund for Horticultural Excellence at Auburn University, which sponsors annual international study tours for horticulture majors. Registration deadline is Nov. 7.

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

Nov. 14 Clays for Clovers Sporting Clay Classic 7:30 a.m.–4:30 p.m. Selwood Farms Childersburg

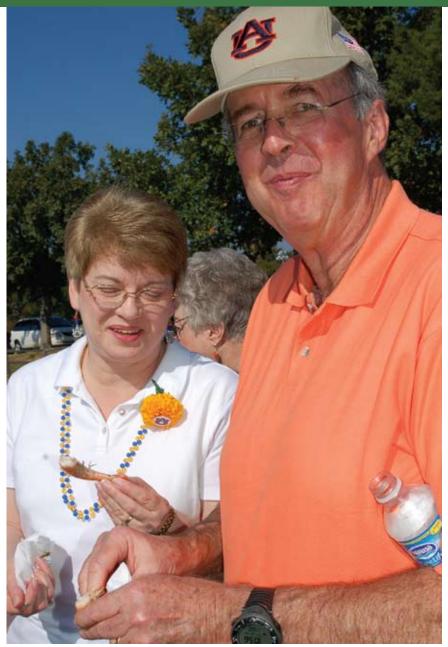
This event, sponsored by B.L. Harbert International, raises money for Alabama 4-H. Deadline for registering is Oct. 30. Go to www.aces. edu, click on "More Featured Pages" on the right, then click on the 4-H Sporting Clays Classic page for more information.

Contact: Nancy Alexander at 334-844-2219 or alexana@auburn.edu

Dec. 19 Fall Semester Graduation Breakfast 9–11 a.m. Ham Wilson Arena Auburn University Auburn

Fall 2008 College of Agriculture graduates and their families are 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



GETTING A TASTE—Jim Bannon, director of the Alabama Agricultural Experiment Station's outlying units, and his wife, Susan, enjoy Alabama farm-raised shrimp they sampled at last year's Ag Roundup.

If It's Homecoming, It Must Be Ag Roundup!

Ag Heritage Park will be the scene of a super-sized tailgate party Saturday, Nov. 8, from 9 a.m. to noon as the Auburn University College of Agriculture, the AU Agricultural Alumni Association and a first-ever corporate sponsor—farm-equipment giant John Deere—team up to host the 29th annual Taste of Alabama and Fall Ag Roundup.

The event has become an Auburn homecoming day tradition, annually drawing 1,500 to 2,000 Tiger fans who have learned that for a mere \$5 admission fee for individuals 6 and up, they can get their fill of a bounty of food items grown and/or processed in Alabama—from fried chicken strips, grilled goat sausage and farm-raised shrimp to boiled peanuts, Satsuma oranges and collard greens. A major hit last year was homemade peach and blackberry ice creams, made with peaches and berries produced at the Chilton Research and Extension Center in Clanton.

In addition to food, Ag Roundup offers musical entertainment; visits from Aubie and the Auburn cheerleaders; exhibits from academic departments, student organizations and commodity or agribusiness groups; and loads of children's activities. There also will be live and silent auctions offering dozens of top-quality goods to the highest bidders. Proceeds from the auctions go to fund scholarships for deserving students in the College of Agriculture.

John Deere, as corporate sponsor, is also donating \$10,000 to fund scholarships in the College of Ag.

Ag Heritage Park is located on Samford Avenue, just across from the AU Athletic Complex and only two blocks from Jordan-Hare Stadium. For the homecoming game, Auburn will take on University of Tennessee at Martin. Kickoff is set for 1:30 p.m.

For more information on this year's Taste of Alabama and Ag Roundup, contact Elaine Rollo at 334-844-3204 or rollome@auburn.edu.



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