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AG illustrated

contents

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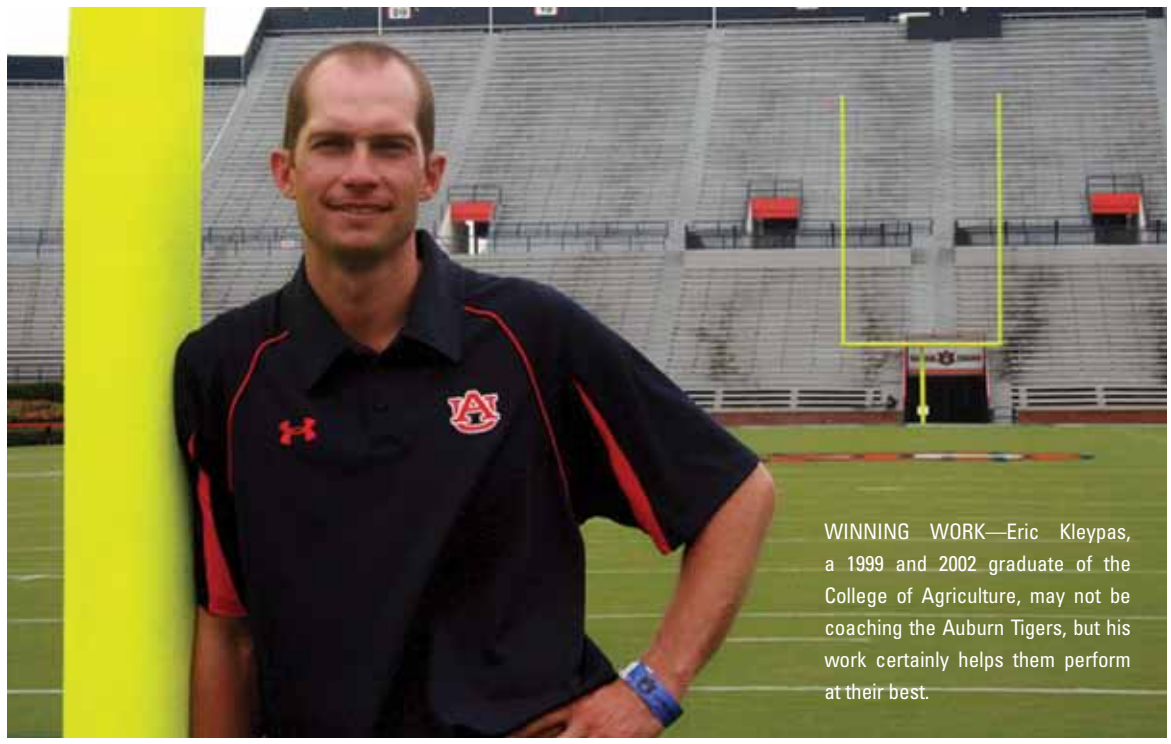
Success Story

Field Man

Agronomy and Soils Grad Kleypas Protecting Auburn's Turf

By Katie Jackson



WINNING WORK—Eric Kleypas, a 1999 and 2002 graduate of the College of Agriculture, may not be coaching the Auburn Tigers, but his work certainly helps them perform at their best.

ASK ERIC KLEYPAS ABOUT his best and worst days working on Auburn University's storied Jordan-Hare Stadium/Pat Dye Field and he will cite a specific 24-hour period in 2001.

"My best experience was in 2001 when the Auburn football team defeated the number-one ranked Florida Gators. I was working with the field crew and watched the game from the sidelines. The atmosphere was amazing," he says.

"My worst experience was the next day when we assessed the damage to the field, hedges and goal posts," he continues.

Kleypas, a College of Ag alumnus who is manager for athletic turf in Auburn's Athletic Department, vividly remembers how fans rushed the field after the game. "They tore down anything within their path," he says. "Needless to say, we had a little work to do before the next home game."

But hard work is nothing new to Kleypas, who is responsible for virtually every Auburn University athletic and performance field on campus. And the kind of work he does fits him to a, well, tee.

(continued on page 4)

OUT WITH THE OLD—Jane Hoehaver Farr holds one of the old Wadsworth greenhouse climate controls installed when the Plant Science Research Center was built in 1991 beneath one of 12 new, advanced and digital Wadsworth EnviroSTEP climate controls that now manage and log the temperature, humidity and more in each of the PSRC greenhouses' 12 zones.

Advancing Science

Climate Control

Scientists, PSRC Staff Welcome New Advanced System

By Jamie Creamer

NOT SO VERY LONG ago, if a window-rattling storm jolted Jane Hoehaver Farr awake in the middle of the night, she would jump out of bed, throw on her sweats, brave the ferocious winds and torrential rains out to her car and, within 10 minutes, come to a screeching halt at the Plant Science Research Center on the outskirts of the Auburn University campus.

OK, that might be exaggerating things, but not by much. As director of the Alabama Agricultural Experiment Station's PSRC, Farr is responsible for 24/7 climate control in the center's 12,800-square-foot research greenhouse, and she does not take that duty lightly.

At any given time, the greenhouse shelters around 50 research experiments, and precise greenhouse weather data is essential for interpreting their outcomes.

So if ensuring that an after-hours storm hadn't knocked out power at the PSRC or slammed greenhouse vents shut or damaged structures or equipment or anything else that could disrupt the research work meant that Farr—or, if she was out of pocket, greenhouse research technician Mark Foshee—had to make mad, middle-of-the-night, almost-always-unnecessary dashes to check things out at the PSRC, so be it.

But now there's great news for Farr and Foshee—and for AAES researchers, especially—in the form of a new, technologically advanced greenhouse climate-control system that is up and running at the PSRC.

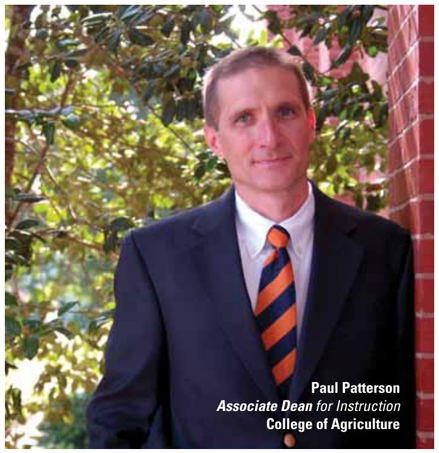
The welcome tidings for the two-person staff are many, and topping that list is that those emergency trips to the center at all manner of times are over. The new system includes an alarm manager that calls or e-mails Farr and Foshee immediately in cases of power outages, structure damage or equipment malfunctions, and it also has software that gives them remote access to the controls so that they can adjust settings from their home laptops.

"Mark and I still have a lot to learn about the system, but it's already really streamlining things for us here and is going to save us a lot of time and steps," Farr says.

The system's top selling point, though, should please AAES researchers.

"It's amazing how much climate data we can now provide for our researchers," Farr says. "The format of the data will make it simpler for them to write up their research, and they're going to have more detailed and more accurate environmental information than they've ever had."

(continued on page 4)



Paul Patterson
Associate Dean for Instruction
College of Agriculture

View from *Ag Hill*

The fall semester is well under way! It is exciting to be back at Auburn, my own alma mater, and to be able to meet and greet our new and returning students. They are settling into their fall schedules. There is a hint of fall in the air and excitement over our football team's season can be felt everywhere on campus.

Recently, we met with our new students at our New Student Updates to remind them of the resources and student policies that will improve their academic success and enrich their college experiences. We want to encourage our new students to start their college careers with confidence and strength. We also recently held a ceremony to recognize our scholarship recipients and thank the donors who made these scholarships possible. At this ceremony, we announced that our scholarship awards summed to more than $750,000 and were awarded to 240 students. This places the College of Agriculture among the top three colleges on the Auburn campus with regard to the number of awards and total dollars awarded.

Our scholarship program continues to be an important tool in our recruitment efforts, and we are proud of the caliber of this year's freshmen class. The average ACT score for this year's freshmen is 25.4, compared to 24.8 a year ago. The average high school GPA held steady at a very respectable 3.70. Our enrollment numbers, however, were down slightly from a year ago. This year, 236 new students enrolled in the College of Agriculture, compared to 270 last year. This year brought in 173 freshmen and 63 transfer students, which compares to 186 freshmen and 84 transfer students last year. Most of the drop in new student enrollment occurred among in-state freshmen (down by 12) and transfer students (down by 13). Enrollment of out-of-state freshmen dropped slightly from 70 to 68. For the college, total enrollment is expected to be down slightly from last year's high of 1,212. This decline in enrollment reverses an eight-year trend in enrollment growth and is likely due to the downturn in the economy and the increased cost of education.

Once our students come to the College of Ag, I am confident that we are providing them with an outstanding college experience. We are fortunate to have faculty dedicated to the success of our students, and we have many faculty members who take an active interest in the lives and success of our students. Based on the results from the administration of the National Survey of Student Engagement at Auburn University, Auburn University's College of Agriculture ranks high, relative to other colleges at Auburn, on measures related to student-faculty interaction. It was revealed that nearly one-third of our students are engaged in research with a faculty member. These are excellent learning experiences for our students that have a positive impact in preparing them for their careers. We also try to assist students in a friendly and helpful manner with all the obstacles and challenges students encounter as they progress through their studies and, for some, adjust to college life. Indeed, this same survey showed that the College of Agriculture ranks high. relative to other colleges at Auburn, with regard to creating a "supportive campus environment."

Like the theme song from the former sitcom Cheers, the College of Agriculture is a place where "everybody knows your name." Come visit us here on campus and be in touch if you have questions. You may contact me at 334-844-3254 or 334-844-2345.

Making Contact

Want to get in contact with the College of Agriculture, Alabama Agricultural Experiment Station or Alabama Cooperative Extension System? **See below!**

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Morgan County/Bullard Scholarship Established

A $50,000 gift from the Morgan County Farmers Federation has endowed a new scholarship that offers help to Morgan County youth while honoring the memory of one of Morgan County's most esteemed farmers.

The Henry A. Bullard/Morgan County Farmers Federation Endowed Scholarship in the College of Agriculture was officially established in 2009 to honor Bullard, a lifelong farmer who served in the county Federation organization for more than 60 years. Bullard, who was a leader in his community, also was a leader in agriculture and was one of the first farmers in Morgan County to pioneer no-till farming methods. In addition to his commitment to stewardship of his own soils, Bullard also worked to help others do the same by serving on the Morgan County Soil and Water Conservation District committee for more than 30 years.

The scholarship is available to any Morgan County resident enrolled in the College of Agriculture who has a demonstrated need for financial assistance and also has a minimum 2.5 grade point average.

Though the Morgan County Federation's generous contribution immediately ensured that the scholarship was available in 2009, additional contributions to the fund are needed and welcome.

To learn more about donating to this and other College of Ag scholarships or programs, contact Mark Wilton at 334-844-1198 or wiltomt@auburn.edu.

Tee-off for a Good Cause… at the Orr Golf Tournament Nov. 12

The Sixth Annual Henry P. Orr Memorial Golf Classic tees off Thursday, Nov. 12, at 9 a.m. at the Pursell Farms' FarmLinks Golf Club in Fayetteville. All proceeds from this event support the Henry P. Orr Endowed Fund for Horticultural Excellence at Auburn University, which provides educational opportunities beyond the classroom for students in horticulture. Various Orr Classic sponsorship levels are available, ranging from $250 to play up to $3,000 to sponsor the dinner. For more information, contact Katie Hardy at hardykc@auburn.edu or 334-844-1475.

Ag Roundup, Taste of Alabama Celebrate 30 Years on Nov. 7

FISH TAILS--Actually, it's not tails but perfecfly fried catfish nuggets that Jesse Chappell, associate professor of fisheries and allied aquacultures, was offering to visitors at last year's Ag Roundup and Taste of Alabama Ag. Those tasty nuggets and so much more will be back on the menu this year.

Homecoming is fast approaching and so, too, is the 30th anniversary of Auburn University's largest tailgate party—the wildly popular Fall Roundup and Taste of Alabama Agriculture—to be held at Ag Heritage Park on Nov. 7 prior to the 2009 homecoming game.

The event provides a reunion opportunity for alumni and friends of the College of Agriculture and also is a chance to show the public how important (and delicious) agriculture is to all Alabamians.

Visitors can sample many of Alabama's finest agricultural products ranging from fish, beef and chicken to fruits, vegetables and nuts. They also can view educational displays, hear live music, participate in children's activities and enjoy visits from the AU Pep Band and the AU Cheerleaders.

Auctions, both live and silent, will be held offering everything from cookbooks to vacation packages. Monies raised from these auctions provide much-needed scholarship support for deserving students in the College of Agriculture.

Ag Roundup/Taste of Alabama Agriculture is co-sponsored by the College of Agriculture and the AU Agricultural Alumni Association, with corporate partners Milo's Tea and John Deere. It will open at 9 a.m. prior to the Auburn/Furman homecoming game and run through noon at Ag Heritage Park, a historic greenspace and recreational and research site located on the corner of Samford Avenue and Donahue Drive in Auburn.

Admission is $5; children 6 and under are admitted free. Tickets are available at the gate.

Ag-related businesses and organizations are invited to set up exhibits at the event. There is no fee for participation and each exhibitor will be provided approximately 15 feet of setup space, a table and chairs. Exhibitors may also bring their own small tents (8- x 8-foot or 10- x 10-foot). No product sales are allowed, but samples of products may be offered.

Donations of auction items are also welcome.

For more information, call 334-844-3204 or send an e-mail to rollome@auburn.edu.

Alumni Updates

Brother and sister Charlie Jones and Shay Jones Runion both earned their degrees from Auburn's College of Agriculture. They continue to work as a team nowadays, too, both working for Arrow Exterminators, an Atlanta-based pest management company. Jones is vice president of sales and Runion is vice president of professional development. While the siblings may have different skill sets in their jobs, one thing is certain: They both LOVE Auburn!

Lisa Ann McKinley, a 1987 poultry science graduate, recently won a Superior Accomplishment Recognition Award and a Time Off Award from her employer, the Environmental Protection Agency Region 4 office. The awards stemmed from her work conducting multiple concentrated animal feeding opertation inspections during 2009, which resulted in the issuance of multiple enforcement actions; for managing and processing 16 CAFO cases; and for providing extensive compliance assistance.

Hall of Honor Inductees Named

Five men who have made significant contributions to Alabama agriculture will be honored in Auburn Feb. 23, 2010, when they are inducted into the Auburn University Ag Alumni Association's Hall of Honor/Pioneer Award gallery.

Those slated for induction into the Hall of Honor, which honors living Alabamians for their achievements in and for Alabama agriculture, are William E. Powell of Montgomery, executive director of the Alabama Cattlemen's Association; William E. Hardy of Auburn, former College of Ag dean for instruction and a professor in the Department of Agricultural Economics and Rural Sociology; and Huntsville cattleman and businessman Raymond B. Jones.

Those being honored with Pioneer Awards, which are given posthumously to Alabama agricultural leaders, are Jamey M. Clary of Akron, a former Alabama Cooperative Extension System coordinator, and Ross Debter, who was a well-respected poultry and cattleman from Horton.

More details on the winners and the award ceremony will be featured in future issues of Ag Illustrated.

In Memoriam

Tom Dodd, 94, of Semmes, died May 7 in Mobile. Dodd, a 1938 graduate of Auburn's College of Agriculture, operated Tom Dodd Nurseries in Semmes from 1938 to 1997 and is credited with introducing several new varieties of azaleas, camellias and hollies.

Julian Holmes, 69, of Talladega, died Aug. 29 in Birmingham. He was a 1962 graduate of the Department of Agricultural Economics and Rural Sociology.

James Hugh Kyzar Jr., 93, of Andalusia, died Aug. 30 in Andalusia. He was a 1938 graduate of Auburn with a degree in agricultural science and was co-owner of Kyzar Milling Company and a sales representative for The Pillsbury Co. and Nutrena Feeds.

Gregory Lee Mullins, 53, a former Department of Agronomy and Soils faculty member, died July 18 in Las Cruces, N.M.

James Parrish, 65, an avid Auburn fan and supporter of the College of Agriculture, died Aug. 28 in Dothan.

Prince Wilson Webster, 83, of Loachapoka, died Aug. 27 in Auburn. He was a 1952 Auburn graduate with a degree in agricultural science.

(FIELD MAN, *from page 1*)

AUBURN COLORS—One of the first things Eric Kleypas and his Auburn turf team do before each home game is paint the logos and emblems on the field. Yes, Kleypas does have lots of shoes that are now orange and blue.

A native of Brownwood, Texas, Kleypas and his family moved to Guin, Ala., when he was in fourth grade. After high school and two years at a community college, Kleypas came to Auburn to major in chemical engineering but quickly realized he did not want an indoor job.

"I had a good friend majoring in turf management," he recalls. "A couple of conversations with my friend convinced me that switching to turfgrass was just what I needed."

Kleypas graduated with a soils/turfgrass management degree in 1999 and earned his master's degree in agriculture in 2002. It was during his undergraduate years that he got his first taste of managing turf, first with an internship at Belle Meade Country Club in Nashville, Tenn., then as a student worker on Auburn's Athletic Department grounds crew.

"I lucked out in 1998 when the Athletic Department formed an agreement with the Department of Agronomy and Soils," he says. Under the supervision of Auburn turf professors, he and a handful of other turfgrass students learned how to apply fertilizers and pesticides on the athletic fields.

"We were gaining valuable experience and having the time of our lives," he says. "We could not wait to get out of class and go to work on the fields. I was able to take what I was learning in the classroom and apply the knowledge to the athletic fields."

He continued to work on the fields throughout college and, after finishing his master's degree, was hired by the Athletic Department in 2002, a job he attributes to good luck and great timing.

"Luckily, the facilities manager at Auburn needed to hire a full-time turfgrass manager. There is nothing like being in the right place at the right time," he says.

Kleypas and his crew stay busy in the fall, but the same goes for the rest of the year as they care for all of the university's football, baseball, football practice facility, soccer, track and band fields. They also maintain the landscaping inside Jordan Hare Stadium, Plainsman Park, the men's and women's athletic complexes, Jane B. Moore Softball complex, Hutsell/Rosen Track and the golf teaching facility.

Kleypas's crew consists of six full-time employees and six or so students—predominantly turfgrass and horticulture students—who work between classes.

"With so many responsibilities, I rely on our crew to make it happen. I have great crew members capable of thinking as turf managers," Kleypas brags of his team.

Kleypas and his crew begin work for home football games on Thursdays and Fridays when they paint logos on the field. Six hours before kickoff on game days, they start setting up the sidelines, putting out pylons, installing goal post pads, turning off the irrigation main and raising the flags. "Depending on how the coach wants the field to play, we may also mow before the game," he notes.

Once the field is ready, they assist with a variety of tasks ranging from helping with Tiger Walk to running smoke machines to taking the eagle to the upper deck.

When the game is over, they're back at work cleaning up the sidelines and mowing the field. "As soon as the television crew is off the field, I turn the irrigation main on and irrigate the field. The quicker the field is mowed and irrigated, the sooner the field begins to recover," he adds.

The football field is used year-round, so work there is constant. In the fall, they overseed the field's bermudagrass turf with perennial ryegrass to keep green grass on the field throughout the winter. In spring, they transition back to bermudagrass by removing the ryegrass. Throughout the summer they pamper the bermudagrass and core aerify and topdress it to alleviate compaction, improve water infiltration and remove logo paint that has built up in the soil.

And then there are the other fields to worry about. "In the spring, we can have baseball, softball, track, spring football practice and spring soccer practice going at the same time. A 40-hour week can quickly turn into an 80-hour week," he says.

"It takes a special woman to put up with our work schedule," Kleypas adds, and that remarkable woman is his wife, Vanessa, who grew up five miles from him, though the two did not meet until they both came to school at Auburn. "I owe my sanity to Vanessa and our Jack Russell terrier, Claire. Spending time with Vanessa helps me put things in perspective and realize that a divot on the turf is not the end of the world."

Kleypas also finds stress relief in another outdoor passion: He spends his spare time planting trees and food plots on his hunting land.

However, Kleypas really does love his job, and he credits his former agronomy and soils professors with much of his success. "They helped me gain the knowledge required to be good at my job. I still feel like I can call them any time with questions," he says. He hopes to continue that mentoring tradition by someday establishing an intern program for Auburn turfgrass students.

In the meantime, Kleypas has a busy fall ahead of him, and a busy winter, spring and summer, all of which makes him very, very happy.

(CLIMATE, *from page 1*)

LEARNING CURVE—PSRC research technician Mark Foshee and center director Jane Hoehaver Farr put their heads together to figure out a feature of the new climate-control system software.

For instance, Farr can give researchers reports, in graph or log form, that include daily temperatures, humidity levels, sunlight levels, summaries of average daytime and average nighttime temperatures and humidity, break that down into daytime and nighttime data and more, all in 15-minute increments. And, Farr says, the plan is to have the system set up by Nov. 1 to give research faculty access to their data.

The new system, Wadsworth Control Systems' digital EnviroSTEP, replaces a now-outdated analog Wadsworth system that was installed when the PSRC was built in 1991. With that system, each of the greenhouse's 10 zones had a thermostat that Farr would set manually according to the temperature and humidity requirements of the plants inside.

With EnviroSTEP, a 16- by 16-inch computer control unit mounted beside each of the zones has daytime, nighttime and DIF temperature and humidity set points and a ramping function that changes the weather conditions gradually, mimicking nature. The control also has aspirated temperature and humidity sensors contained in a single module, a solar-shielded outdoor temperature sensor and automatic calculations of sunrise and sunset.

Farr is especially proud of the new system's data-logging capabilities.

"The old system was run by a computer that still had the old 5.5-inch floppy disk, and without the disk, it wouldn't run," she says. "Plus, the data had to be saved each week and stored on 3.5-inch floppy disks.

"Now, our computer can hold years of data that can be archived to another network drive or an external hard drive for easier storage," Farr says. "The previous data-logging system had been designed by Experiment Station electronics technicians when the center opened."

For today's needs, the Wadsworth company offers periodic data-logging upgrades and outstanding technical support.

"We shouldn't be without the capacity to log the data on each greenhouse ever again," she says.

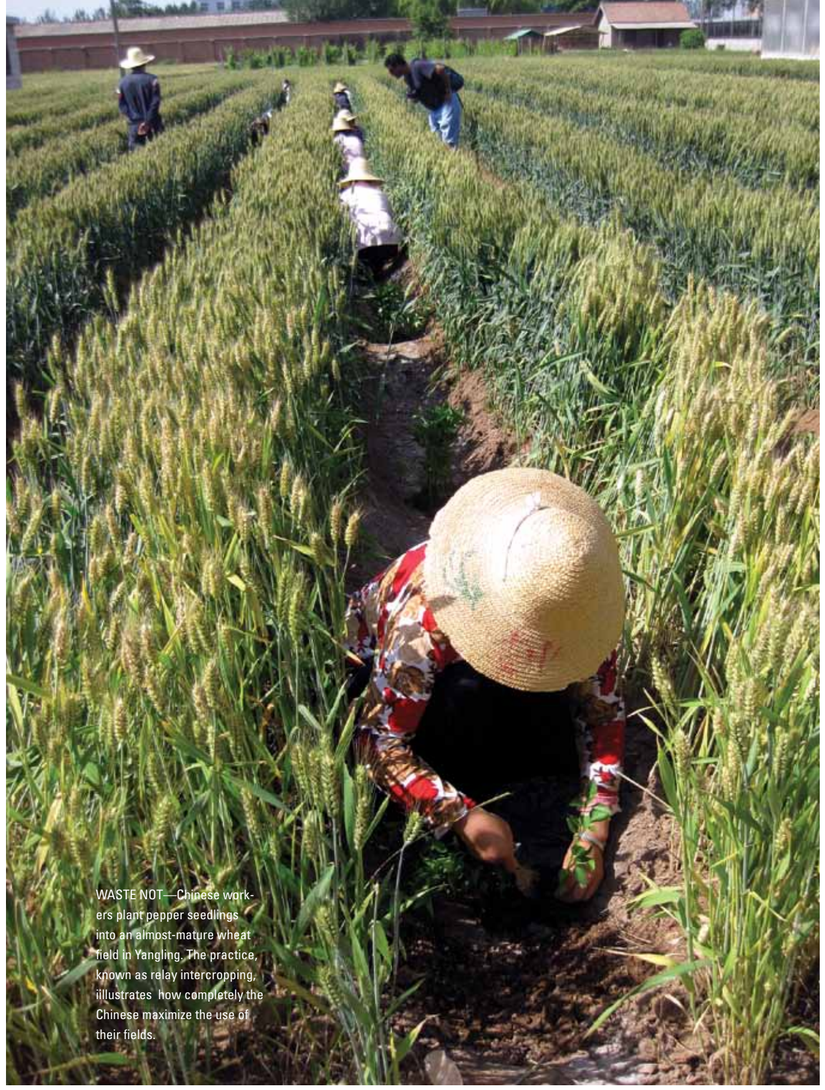
Replacing the PSRC's climate-control system wasn't part of the plan earlier this year, when construction began on two new greenhouse zones. The original PSRC design had included 12 separate climate-controlled zones—zones are 1,000-square-foot greenhouses within the main greenhouse, basically—but the money ran out at zone 10. Last year, at last, funds were appropriated for those two remaining zones, both of which, obviously, had to have individual weather-control systems. That posed a dilemma.

"Wadsworth had phased out the system we had but said they could track down a couple of control units like we had with the other zones so that we could stay with the system we had," Farr says. "That system had been extremely reliable, and staying with it would have been the least expensive option, but finding replacement parts on down the road would have been a huge problem."

The only alternative, then, was a completely new system with controls for each zone and, after carefully evaluating several in terms of features, cost, cost effectiveness, efficiency and customer service, Farr and Jim Bannon, AAES outlying units director, chose Wadsworth's EnvironSTEP, along with its STEPsaver software.

The new system was installed in July, and since mid-August, Farr and Foshee have been training with company representatives and learning a great deal through trial and error. Farr says there's a "staggering amount of stuff" they have yet to conquer, too.

"But be patient with us," she says, "because this is going to be fantastic."



WASTE NOT—Chinese workers plant pepper seedlings into an almost-mature wheat field in Yangling. The practice, known as relay intercropping, illustrates how completely the Chinese maximize the use of their fields.

MARKET FRESH—Nick Sekora, right front, considers buying some of the dried fruits street vendors were hawking in the Muslim Quarter of the ancient Chinese city of Xi'an.

WORLDLY STUDIES—From left, Emily Stutzman, CJ McGrath, Li Lian Wong, Nick Sekora, Warner Orozco-Obando, Mike Mulvaney and David Weaver strike a pose in front of NWAFU's administration building.

HAZY DAYS—It was a super-bad-air day, but Auburn students, from left, Mike Mulvaney, Nick Sekora and Emily Stutzman still made it to the top of a hill overlooking a fertile farm valley near Yangling. All of the Maymester participants bought bikes in China to tour the countryside on weekends.

Study Abroad

Two Thumbs-Up

Maymester '09 Exceeds Expectations

By Jamie Creamer

If faculty members got gigantic bonuses based on students' ratings of their classes, agronomy and soils professor David Weaver would be sitting pretty right now, because for the plant genetics and crop improvement crash course he taught in early summer, the College of Ag graduate students who took the class scored it 11 on a scale of 10.

That Weaver was teaching his AGRN 5100/6100 course to Auburn students in a classroom on the Yangling campus of China's Northwest Agriculture and Forestry University, however, might have something to do with that off-the-chart rating.

Weaver and the students—Mike Mulvaney in agronomy and soils, Emily Stutzman in ag economics, Li Lian Wong in fisheries, Nick Sekora in plant pathology and CJ McGrath and Warner Orozco-Obando in horticulture—were in China May 10 through June 13 on the Office of International Agriculture's first-ever Maymester Abroad study tour, and the experience, all agree, was nothing less than grand.

"It went well beyond my wildest expectations," Weaver says.

In Maymester Abroad, Auburn faculty teach Auburn students Auburn coursees for Auburn credits—all in intensive three- to four-week time frames, and all in developing countries around the world.

Maymester courses are open to students enrolled at the host school, too, and at NWAFU, students took full advantage of the opportunity to attend an American professor's class. Though few of them could be there every day because of schedule conflicts, Weaver estimates that a good 80 to 100 different students sat in on at least one of his plant-breeding classes. They didn't attend just to say they did, either, he says.

"They weren't earning credits by coming; they came to listen, and to learn how their technical terms and concepts in the field of plant genetics translate into English," he says. "Unlike people in the U.S., the Chinese realize how important plant breeding is to improving crops and increasing food production."

As for the six Auburn grad students, they gained much more than credit hours in China. The opportunity to interact and communicate with the people there, see firsthand the region's amazing food-production system, experience life in a different culture and broaden their global perspectives was priceless.

Auburn's Mulvaney says he signed up for the Maymester tour to expand his international agricultural experience, and he got his money's worth.

"I'm interested in working on agricultural development projects in the developing world, and this trip broadened my horizons, and my resume.

"In fact," he adds, "I just submitted a job application as a soil scientist in China!"

For an entertaining, first-person account of Maymester 2009, check out Weaver's daily Maymester journal at www.ag.auburn.edu/oia/faculty/weaver-2009/. The site also features a collection of fantastic photos, courtesy of Weaver and Mulvaney.

Wet and Wild

Kleypas Faced Another Memorable Day on the Plains

On Saturday, Sept. 19, just about kickoff time for the Auburn vs. West Virginia football game, the skies over Jordan-Hare Stadium Stadium opened up. For Eric Kleypas, it was "an eye opening experience."

"Our rain gauge at Jordan-Hare collected 3.75 inches of rain in less than an hour," he says. The intensity of the rain caused the campus storm drains to back up, flood the soil on the football field and put the field under water.

"Not a very comforting feeling to see your drain lines work in reverse," Kleypas admits. However, his discomfort was eased once the campus storm drainage system caught up. "The field drained quickly and was quite playable. I was very pleased with how the field performed."

According to Kleypas, the field's drainage system was installed in 1983

FLOOD OF QUESTIONS—When Eric Kleypas's wife, Vanessa, started getting questions from their friends about how the Auburn University football field recovered so miraculously on Sept. 19, she decided to post answers on her personal blog. Unable to find a photo of the event, she drew her own reenactment of the flood. We asked her to do the same for us using a real photo of the stadium. Notice her attention to detail, such as the dark clouds above the stadium and the orange and blue boat on the field. The guy in the boat is Eric, waving a white flag of surrender to the rain.

by Paul Conner and the Auburn grounds crew and involves buried perforated pipes that feed into the central campus storm drainage system. "The amazing thing is that, 26 years later, the system works like it is brand new," says Kleypas.

"We have no pumps to speed the process and no gravel layer under the root mix. It is a simple gravity-driven system that works like a charm," he adds.

The charmed system made it possible for an Auburn victory that night in front of an almost-capacity crowd. It also amazed sportscasters for ESPN and other networks who were singing the praises of the field. Kleypas may never have been mentioned by name, but you can be sure he was both pleased and relieved with the outcome.

THE "POP QUIZ MAN" LEAVETH—It might be that horticulture professor James Brown, left, is grinning his trademark grin because College of Ag Dean Richard Guthrie is recalling a humorous story, but it could just be because he's at a retirement party—and it's his. Brown retired in August after 24 years as a Department of Horticulture faculty member specializing in fruit and vegetable production. He long taught crop production and organic gardening classes and was such a threat to give pop tests that he called himself "The Pop Quiz Man."

PIZZA KNOWLEDGE—Freshmen and transfer students in the College of Ag got to eat lots of pizza and learn the ins and outs of campus life, thanks to three New Student Update sessions led this fall by the Student Services office. The chance to learn and meet other newbies was invaluable and is just one of the reasons that the College of Ag is known for its student-friendly ways.

Faculty Accomplishments

Conner Bailey, professor of rural sociology in the Department of Agricultural Economics and Rural Sociology, has accepted a three-year appointment to the Science Advisory Committee of The World Fish Center. Over the past 30 years, Bailey has conducted research and published on the impact of technological change on communities dependent on marine and coastal resources in Southeast.

David Teem, retired professor of agronomy and soils, was recognized recently as a founder of the Southern Weed Science Society Weed Contest on its 30th anniversary. The weed contest has since been duplicated by the North-East and North-Central Weed Science Societies. According to **Andrew Price**, a USDA-ARS-National Soil Dynamics Laboratory researcher here at Auburn and SWSS Weed Contest committee chairman, the contest has educated, entertained and frustrated many hundreds of students since its inception.

Can art move people to protect and restore our aquatic ecosystems? That question and many more were addressed in September by College of Ag scientists **Bill Deutsch,** Alabama Water Watch director, and **Eve Brantley,** Auburn University water specialist, when they participated in a panel discussion that included two artists whose work has focused on water. This event is part of a water-themed art exhibit that will continue until Nov. 10. For more details, visit www.ag.auburn.edu/ArtinAg.

Biosystems engineering technician **Dawayne Flynn** and associate professor **Oladiran Fasina** designed and constructed a mobile teaching laboratory to demonstrate the collection of solar energy for production of electrical power to students in biosystems engineering. Funded by a grant from the College of Agriculture, the system allows students to learn firsthand the practicalities of generating electricity using solar energy.

Christian Brodbeck, research engineer in biosystems engineering, presented a paper at the recent meeting of the International Union of Forestry Research Organizations held in Australia. His paper highlighted recent work at Auburn in developing yield sensors for forest harvesting machines and use of LiDAR (Light Detection and Ranging) for gathering information to improve forest management.

Several members of the Department of Poultry Science received awards at the Poultry Science Association annual meeting held in North Carolina in July. Professor **Pat Curtis** received the Phibro Extension Award and professors **Ed Moran** and **David Roland** were both chosen as PSA fellows. Moran's former graduate student **Nancy Joseph** was awarded the PSA Early Achievement Award for Industry and associate professor **Wallace Berry's** current Ph.D. student **Lindsay Stevenson** won the Maurice Stein Fellowship Award. For more information go to www.poultryscience.org/awards2009.asp.

WELCOMING COMMITTEE— The tent pictured above held cold drinks and all the fixings for the burgers and dogs served at the Moving Day Picnic. More importantly, it contained several members of the college's faculty and staff who were there to make sure that new students and their families were well fed and well welcomed.

COOKING UP GOOD WILL--College of Ag Associate Dean for Instruction Paul Patterson, pictured at left, helped flip burgers and turn hotdogs at one of two Moving Day Picnic events held in August. This was the second year that the college has hosted such picnics, which give tired parents and students a break from their moving efforts while also introducing them to Ag Hill and the the Auburn agricultural family.

IN THE SWIM OF THINGS—Thanks to the generosity of the Federal Land Banks of North and South Alabama, our Ag Ambassadors were able to hold their second annual retreat this year. During the retreat, Ag Ambassadors met with faculty and staff in each department within the College of Agriculture and received training on admissions, scholarships and public speaking. To wrap up the retreat, the ambassadors spent a fun and educational day in Atlanta where they visited the Georgia Aquarium, World of Coca-Cola museum and ended the day with an Atlanta Braves baseball game.

New Grant Fostering Future Ag Teachers, Leaders

Attracting and retaining quality students into secondary and post-secondary agricultural programs is one of the most difficult problems facing the future of agriculture. A recent U.S. Department of Agriculture grant—MATRIX for the Future: Premier Agriscience Education Academy—awarded to Don Mulvaney in the College of Agriculture and Brian Parr in the College of Education, may help alleviate that problem.

The grant initially will fund fall and winter workshops held in partnership with Alabama FFA chapters. These workshops, known as Premier Agriculture Leadership Workshop (PAWS) conferences, are being held in various locations across the state to make it convenient for FFA members throughout the state. The first was held Oct. 9; two more will be held Nov. 13 and Feb. 5, 2010.

According to Lauren Lewis, a senior in agricultural economics and rural sociology who is organizing the workshops, "PAWS is a day-long workshop presented by the Auburn University Collegiate FFA Chapter to bring alive the FFA mission statement for students by developing their potential for premier leadership, personal growth and career success through agriscience education."

The workshops allow students to engage outside the classroom while discovering leadership opportunities and having fun. In fact, the theme for this year's conference is "Reality Rocks!"

During PAWS meetings, organizers also talk about the opportunity for a select pool of rising juniors and seniors to participate in the first Agricultural Leadership Education Academy to be held in June 2010.

According to Mulvaney, ALEA has great potential to impact secondary agriculture curricula in Alabama and increase numbers of students seeking higher educations in agriculture. It also may serve as a model for other institutions across the nation interested in addressing this or similar problems, he adds.

To learn more about PAWS or ALEA, go to www.ag.auburn.edu/goplaces/ and click on Future Student Events, or contact Mulvaney at 334-844-3200.

Student Accomplishments

Jatinder Aulakh, a Ph.D. student in agronomy and soils, placed seventh at the 30th anniversary of the Southern Weed Science Society Weed Contest. The contest, held in August in Georgia, included weed identification, herbicide symptomology identification, sprayer calibration, calibration math problems and farmer problems (Extension role-playing). Aulakh was among approximately 40 participants.

Biosystems engineering students **Kyle Shuman** and **Michelle Mayer** placed second in the undergraduate student poster competition at the recent American Society of Agricultural and Biological Engineers annual international meeting for their design of a salinity-gradient solar pond. Mayer, who is now in graduate school at North Carolina State University, also was elected second vice president of the International Preprofessional Council of ASABE for the coming year. ASABE is a professional and technical organization dedicated to the advancement of engineering applicable to agricultural, food and biological systems.

Chris Upchurch of Lineville, a senior majoring in agricultural economics, recently was awarded the Clay County Poultry and Egg Association scholarship.

Jessica Butler, a Ph.D. student working with poultry science professor **Pat Curtis**, was recently elected as a student representative to the Poultry Science Association's board of directors.

Making College Possible

Scholarship Donors, Recipients Honored

Back in late August, even before the first 2009 football game kicked off on the Plains, a group of Auburn supporters celebrated a special kind of Tiger victory—the awarding of $755,388 in scholarships to College of Ag students.

That was the day of the annual Scholarship Recognition Program, held at Ham Wilson Livestock Arena to honor the 240 students who won scholarships as well as the many donors who made those scholarships possible.

There are far too many smiling faces to run even a fraction of them in Ag Illustrated but you can see many of them and find out more about the 2009 College of Ag scholarships, donors and recipients by visiting www.ag.auburn.edu/adm/development/scholarship_donors.php.

On the Horizon

In the Works:

New Feedmill Facility Planned for Campus

By Katie Jackson

HIGH-QUALITY, NUTRITIOUS FEED IS KEY TO THE SUCCESS OF ANY poultry or livestock operation. Soon, a new $7 million state-of-the-art feedmill and animal nutrition facility at Auburn University will be helping those animal industries provide the best feed possible.

Auburn University, which has strong academic programs in the animal sciences including a comprehensive Department of Poultry Science, recognized a need several years ago to concentrate on feed research and outreach and began formulating plans for a cutting-edge animal nutrition facility. Auburn will break ground on that dream facility in early 2010.

"This new facility will significantly advance Auburn's teaching, research and extension efforts in feed science, technology and manufacturing," says Don Conner, head of Auburn's poultry science department and leader of the effort to establish the new nutrition center at Auburn.

"Auburn University is the ideal location for this much-needed academic feedmill facility, as this campus lies in the heart of the southeastern U.S., where the majority of U.S. broiler production is located," he says. Flexibility is being planned into this facility so that it can also benefit other animal industries, from beef cattle to pork to aquaculture

Auburn's Poultry and Animal Nutrition Center will be modeled after a modular nutrition center recently constructed on California Polytechnic State University's San Luis Obispo campus. Conner says the modular design minimizes construction costs and time, allows for the flexibility needed in an academic feedmill and enhances the teaching value of the facility.

"This facility will be a flagship academic-industry feedmill facility for the Southeast," says Conner. "It will provide a unique opportunity to advance Auburn's relevant programs to enable the university to better serve our industry clientele." The center will contain equipment representing current and future industry standards, which Conner says is imperative to ensure that this facility effectively serves the needs of the industry.

Krebs Engineering of Birmingham and T. E. Ibberson of Hopkins, Minn., will design the new center. A technical advisory committee of industry representatives was formed to provide input on technical specifications. This group, comprised of poultry nutritionists and feedmilling personnel, recently met for two days and evaluated every design aspect of the facility to assure that both the design and equipment are optimal for meeting the industry's needs now and well into the future.

The new nutrition center will offer the technology and equipment to meet research needs, expand Auburn's outreach efforts via short courses for the feed and poultry industries and provide Auburn students with hands-on training in feed manufacturing and science. It also will enhance outreach and proprietary research programs via contracting/leasing arrangements between Auburn and private companies and provide feed for Auburn University's research and teaching animals.

The center will be funded through Auburn University monies, private donations and in-kind equipment donations. Currently, about 15 percent of the needed funding has been secured; more support is needed to complete the project.

For more information on the feedmill and on donor opportunities, contact Conner at 334-844-2639 or connede@auburn.edu, or visit www.ag.auburn.edu/poul to learn more about Auburn's poultry science department.

ADVISORY COMMITTEE—The Technical Advisory Committee for Auburn's Poultry and Animal Nutrition Center are, seated from left, George Wendelin of Wendelin Equipment Co., Randy Gordon of Koch Foods and Nathan Collins of Pilgrim's Pride; standing from left, John Huggins of Wayne Farms, Tom Frost of Wayne Farms, Richard Obermeyer of Aviagen and Benton Hudson of Tyson Foods.

TRAPPED—Pyramid traps that exude the sweet scent of plums lure peach-damaging plum curculios from trees in this research orchard. Auburn entomologists are using the traps to monitor weevil populations and are determining precisely when to apply pesticides.

Study Aims To Control Peach-Eating Weevils

By Jamie Creamer

The boll weevil may be gone, but one of its cousins, called the plum curculio, is still alive and well and enemy number one for Alabama's $12-million peach industry.

The weevils feed on peaches, plums, apples and other tree fruits. They damage peaches inside and out by feeding on blooms and new peaches, and, worse still, by laying eggs inside developing peaches—eggs that hatch into larvae that then eat their way out of the fruit.

To control the pests, producers must spray their crops with a costly pesticide an average of 12 times from mid-March through the end of June.

But in a study that began in 2006 at the AAES's Chilton Research and Extension Center, Auburn entomologist Henry Fadamiro, ACES specialist Bobby Boozer and entomology Ph.D. candidate Clement Akotsen-Mensah are developing a program in which growers, by using traps to monitor weevil populations, can manage plum curculios with just four properly timed sprayings.

Fewer sprayings will save growers time and money and minimize the environmental effects of chemicals.

The researchers also are testing two new-generation pesticides that are used at lower rates and are less toxic than existing products. They also are investigating management practices that could reduce peach orchards' appeal to plum curculios.

AU Scientist Studies Minnow Moans and More

By Jamie Creamer

IN THE DARK—Fisheries associate professor Carol Johnston, right, and grad student Patty Speares are on a mission to place a remote hydroacoustic recorder in Key Cave near Florence, the only known location of the endangered Alabama cavefish, to determine whether the fish produce sounds. If they do, the sounds possibly could be used as a noninvasive technique to census and monitor the population.

This isn't widely known, but for almost a decade now, Carol Johnston has been using the equipment in her small, soundproof acoustics lab on the Auburn University campus to tap into unsuspecting victims' communication lines—in other words, to eavesdrop.

And in so doing, she has made a remarkable discovery. She has found that beneath the surfaces of our freshwater rivers, streams and ponds lies a fascinating world of sound. It is, in essence, the sound of fish-speak.

Johnston is a fish behavioral ecologist in the Department of Fisheries and Allied Aquacultures and has pioneered the study of sounds that North American freshwater fish produce to communicate with fellow members of their species, especially during the spawning seasons.

Actually, Johnston's fish-sound-production investigation is part of a broader research project in which she proposes to track and define the evolution of spawning modes and behaviors in freshwater fish. Her theory is that the audible signals fish send are essential to courtship and the spawning process.

Already in her research, Johnston has made fisheries history as the first scientist ever to identify and document the moans, squeaks, croaks and songs of sturgeon, catfish, bass, minnows and darters. Now her objective is to interpret those sounds.

For this phase of the research, she has zeroed in on minnows and darters, huge groups of tiny fishes that together account for 60 percent of Alabama's total fish population.

Johnston and a team of graduate research associates are playing their recordings of minnow lingo and darter talk to fishes from the respective species to determine which noises signal anger and aggression, which warn of impending danger and, most important, which are proof that love is in the oxygen supply.

On the latter, Johnston has questions that go beyond knowing the specific audible signals associated with mate selection and breeding: How far do males' solicitation signals travel? Is mate selection a competitive process that makes tempers flare? Are females attracted to signals of certain tones or pitches? Do females produce certain sounds that tell a male wooer the attraction is mutual?

Even though, numbers-wise, minnows and darters are a substantial part of the ecosystem, little research has focused on the two groups. That has created a major information gap in our understanding of aquatic systems; Johnston's findings will go a long way toward filling that gap.

State's Green Industry Keeps on Growing

By Jamie Creamer

Alabama's green industry has stretched its lead as the state's number one cash crop and now pumps $2.89 billion into the state's economy annually, an Auburn University economic analysis of the industry shows.

That represents a 52-percent increase from 2003, when the industry's overall economic impact rang in at $1.9 billion.

The latest study, which is based on 2007 data that Auburn ag economist Deacue Fields collected in a statewide industry survey, also indicates that the horticultural industry now accounts for 43 percent of Alabama's total crop sales, compared to 38 percent in '03. Its closest competitor is cotton at 18 percent of cash receipts, down 6 percent from 2003.

Employment-wise, the number of Alabamians working in businesses directly or indirectly related to the nursery and greenhouse, landscape services, turfgrass and sod and horticultural retail sectors of the green industry soared 41.5 percent over the four-year period, from 30,860 in 2003 to 43,670 in '07.

"The numbers tell you that in Alabama's green industry, things are looking good," says Fields, who spearheaded both studies.

Comparisons of 2003 and 2007 data in each of the four sectors of Alabama's green industry show that:

- The number of nurseries and commercial greenhouses in Alabama dropped from 767 in 2003 to 758, but those operations now contribute $523 million to the state's economy and employ 9,223 people, compared to $306 million and 5,726, respectively, in 2003.
- 97 turfgrass and sod operations, 28 more than in 2003, give 1,862 people jobs and represent $150 million in total output impact, compared to 1,334 workers and $100 million, respectively, in 2003.
- The lawn and landscape sector has grown significantly, from 1,029 state-licensed businesses in 2003 to 1,686, and that growth—which is attributed to the licensing of many previously existing but non-certified operations—means jobs for 13,823 Alabamians, 3,557 more than in 2003, and an economic impact of $909 million, a jump of $264 million from '03.
- 912 horticultural retail establishments, up 185 from 2003, provide 18,763 jobs—an increase of 5,236—and have a total output impact of $1.3 billion, an increase of $131 million.

"Basically, the industry grew 10 to 15 percent a year from 2003 through 2007," Fields says. "And that includes two drought years."

Fields acknowledges that the 2007 analysis does not reflect the nation's current economic crisis and its effects on the green industry.

"The industry grew with the economy and the housing boom, so no doubt we will see some contraction, because there isn't an industry that hasn't been hurt in this economy," Fields says.

Ag's Animal Care Program Earns Accreditation

The Auburn University College of Agriculture has earned international accreditation as an institution committed to the responsible and humane treatment, care and use of all research animals.

The endorsement from the private, nonprofit Association for Assessment and Accreditation of Laboratory Animal Care International covers all vertebrate animals—farm and aquatic animals, wildlife and traditional lab animals—used for research and teaching on the Auburn campus and at seven Alabama Ag Experiment Station outlying units where animal research is conducted.

Jim Bannon, outlying units director, coordinated the voluntary application process, a rigorous, detailed effort that spanned almost three years and involved comprehensive internal reviews of every aspect of the college's animal care and use program. A 457-page Auburn College of Ag program description document Bannon produced when the review was completed was the key component of the application packet that college and AAES administrators submitted to the association in early 2009. This was the college's first time to apply for the designation.

IN GOOD CARE—Casey Eckert, left, keeps a hand on Blue while Cindy McCall, animal sciences professor and Extension equine specialist, uses the American quarterhorse to demonstrate the basics of horse care during her introduction to horse management and training class at the AU Horse Unit on Wire Road. The College of Ag has earned accreditation for its high standards of treating, caring for and handling Blue and all other animals used for research and teaching. Eckert, who was an animal sciences/pre-vet undergraduate at the time of the photo, is now a student in the College of Veterinary Medicine.

The AAALAC then sent four representatives to Auburn for a site review. The site-visit team spent five full days at Auburn, first meeting with Bannon and others to go over the college's program description document page by page and then touring and inspecting all animal facilities, including those at the outlying research units.

The organization officially awarded accreditation earlier this summer, and with that, Auburn's College of Ag joined more than 770 other universities, agencies, companies and institutions in 31 countries that have voluntarily sought and received accreditation. The college must apply for re-accreditation every three years.

Bannon says AAALAC accreditation signifies that the college is strongly committed to humane animal care and that making life as comfortable as possible for all research animals is a top priority for the College of Ag and the AAES. Accreditation also symbolizes program excellence to public and private funding sources and will be a recruiting tool to attract the best and brightest researchers and faculty to the college, he says.

College of Veterinary Medicine

AU Dairy Impacts Future of Food Animal Production

DAIRY—The barn at the John Thomas Vaughan Large Animal Teaching Hospital is the only Grade A dairy remaining in Lee County and one of a few found at veterinary schools across the country.

Schoolchildren know about it. So do 4-H'ers and other tour groups. Otherwise, though, the College of Veterinary Medicine's commercial dairy on the Auburn campus is a hidden treasure.

The only Grade A dairy in Lee County and one of the few found at veterinary schools throughout the nation, CVM's dairy produces milk for the fluid milk market and plays an active part in ongoing research and instruction.

While Alabama may not be a major player in the U.S. dairy industry, the college is still charged with training veterinarians in dairy production and other segments of the food-animal industry. As part of their preparation to become vets, all senior veterinary students spend a two-week rotation caring for the herd of Holstein dairy cows at the CVM dairy. The students do the milking, feeding, raising calves, managing breeding, giving vaccinations and conducting other activities that a working dairy requires.

Having a functioning dairy on campus offers huge advantages in training veterinarians for the future, says Herris Maxwell, associate clinical professor in food animal theriogenology, a branch of veterinary medicine concerned with reproduction.

"In production medicine, treating the sick is not the whole story," Maxwell says. "Management decisions directly influence the profitability of livestock enterprises, and health maintenance is a significant part of the activities required of the modern food animal veterinarian."

And the milk from Auburn's dairy? It's shipped to a cooperative in Atlanta where it's processed, bottled and distributed.

I SPY—Students like these will be able to experience firsthand how scientists investigate climate change when COSAM faculty complete a series of interactive education modules that focus on the science of global climate change. These modules will be incorporated into the high school curriculum across Alabama.

College of Sciences and Mathematics

Climate Change Curriculm to be Developed

The College of Sciences and Mathematics, in collaboration with the Alabama State Department of Education, was recently awarded $600,000 from the National Aeronautics and Space Administration to produce interactive educational modules that focus on the science of global climate change.

The program, Bringing Global Climate Change Education to Alabama Classrooms, will partner with Alabama Science in Motion and allow Alabama's teachers and their students grades nine through12 to experience firsthand how scientists investigate global climate change.

"Different aspects of global climate change and its impact on the earth can be debated," says Steve Ricks, director of the Alabama Math, Science and Technology Initiative. "But regardless of where you stand on the issues, learning how science is applied to study the planet and its climate will help our students acquire the skills needed to compete in a global economy."

Marie Wooten, COSAM associate dean for research, believes the project is a unique opportunity for COSAM to partner with ASIM, which provides professional development for teachers and laboratory experiences for students whose individual schools or systems often do not have access to high-tech lab equipment.

"Within three years, our hands-on, inquiry-based experiments will be incorporated in the high school curriculum across the state of Alabama with the goal of creating a climate-literate society," says Wooten.

COSAM faculty members involved with the project include Kevin Fielman, biological sciences; Ming-Kuo Lee and Luke Marzen, geology and geography; and Yu Lin and Marllin Simon, physics.

College of Human Sciences

Under Armour Takes Its Competitive Advantage into the Classroom

TEAM PLAYERS—CHS alums, from left, Sarah Smith Sollars, Heidi Walliser and Jill Starke are among the highly qualified and dedicated members of the Under Armour team.

Beginning in 2006, Under Armour, INC, the leader in sports performance apparel, became the Official Outfitter of the AU athletic teams. Now, Under Armour's competitive advantage is going to be a force in the research lab and the classroom as well as on the playing field. Through a generous financial gift by the sports apparel giant, the Department of Consumer Affairs in the College of Human Sciences is establishing the Under Armour Endowed Professorship.

Carol Warfield, CAHS department head, says her department is deeply honored to be affiliated with Under Armour, "a company that has redefined the contemporary sports apparel market," she says. Specifically, the Under Armour endowed professor and a multi-disciplinary core of CAHS faculty will work closely with the company on a range of collaborative activities related to product innovation, consumer demand, sustainable products, socially responsible practices and a highly qualified workforce.

The academic side of the newly minted Under Armour/Auburn athletics/CAHS partnership is off to a fast-paced start. Kevin Plank, Under Armour chairman and CEO, was on campus in mid-September as the CAHS Executive-in-Residence. Two more members of the Under Armour management team, including CAHS alum Heidi Walliser, also visited campus for follow-up small group interactions with CAHS students and faculty.

School of Forestry and Wildlife Sciences

Auburn University Professor Receives International Science Award

Hanqin Tian

Hanqin Tian, alumni professor with Auburn University's School of Forestry and Wildlife Sciences, recently received the 2008 Global Change Science Prize for his groundbreaking work as an ecosystem scientist.

Tian was honored for his achievements in the field of global change science by the Ye Du-Zheng Global Change Science Prize Committee at the Chinese Academy of Sciences.

In presenting the award to Tian, the prize committee cited his breakthrough achievement in quantifying the global and regional carbon budget and its underlying mechanisms.

In his research, Tian also examines ecosystem processes and exchanges of energy, water, carbon and nitrogen that occur at the interfaces of the atmosphere, biosphere and hydrosphere. For a decade, he has researched the interactions between climate changes and the global carbon cycle, which he believes is one of the most important issues facing humankind in the 21st century.

The Global Change Science Prize is considered one of the highest recognitions in this field and was established by Ye Duzheng, an academician, former vice president at the Chinese Academy of Sciences and founder of China's atmospheric science and global change research initiative.

HORSES AND RIDERS—Tanner Jones, a member of Tuscaloosa County's 4-H Horse Club, strokes his beloved Black Betty while waiting to compete in an event at the 37th Alabama State 4-H Horse Show in Montgomery. Jones was one of the more than 260 4-H'ers from 34 Alabama counties who attended the week-long, mid-summer competition. That was a record number of participants and of counties. Bob Ebert, Extension animal scientist and 4-H youth livestock programs coordinator, says that showing horses is an expensive venture but that this year's crowd of 4-H'ers and their parents in the midst of a struggling economy shows a strong commitment to the 4-H horse program. Jones's Black Betty was a sick rescue horse that he nurtured back to full health; the duo placed in two of the show's events.

New Web Site Covers Urban Pest Management Problems

Top-notch pest-management information that can help you achieve long-term pest control in an economically and environmentally sound way is now at your fingertips on eXtension's interactive Web site, www.extension.org.

Go to the eXtension (pronounced E-extension) home page and click on Resource Areas to find the new "Pest Management in and around Structures" link to access a wealth of information on the integrated pest management, or IPM, approach to keeping insects—and unwanted critters, too—out of homes, schools and businesses, landscapes included, in urban areas.

The site clearly and concisely takes it from the top, explaining what IPM is—an effective and environmentally sensitive combination of common-sense practices that control and ultimately prevent infestations—how it works, why it's a smart move and how to implement it.

Fudd Graham, coordinator of the fire ant management and pesticide safety programs at Auburn University, notes that "Pest Management in and around Structures" also features links to some of the best urban IPM Web sites for each state, as well as a complete glossary and answers to a list of frequently asked questions. And if you have questions that aren't addressed on the list, you can Ask an Expert because entomologists from land-grant universities in Alabama and nationwide are standing by and are ready to help.

The urban IPM resource is one of 24 Web communities within eXtension, a national project of the U.S. Cooperative Extension Service and a partnership of more than 70 land-grant institutions, including Auburn, Alabama A&M and Tuskegee universities.

Available to the public, eXtension is an online, interactive learning environment where users can find timely, objective, research-backed information, provided by university experts, in areas ranging from cotton production to organic farming, from managing animal waste to managing wildlife and from personal finance to families, food and fitness.

Alabama 4-H Forestry Judging Team Wins National Championship

The Tuscaloosa County 4-H Forestry Judging Team did Alabama proud over the summer by defeating teams from 13 other states to claim top honors at the National 4-H Forestry Invitational in Weston, W. Va.

The Alabama team—comprised of Tamara Beams, Amelia Dewitt, Forrest Ford and Hunter Ford—finished with 1,690 points, 61 ahead of second-place Illinois. Louisiana, Arkansas and Tennessee rounded out the top five states. Forrest Ford had the highest individual score in the overall competition. DeWitt came in second and Beams finished fifth.

The Tuscaloosa team earned the right to represent the state at nationals by winning the 2009 Alabama 4-H Forestry Invitational. On the national level, state teams competed in tree identification and measurement, forest evaluation and insect and disease identification, compass orienting and topographic map use. The teams also vied in the Forestry Knowledge Bowl (the Alabama team claimed the national championship) and were tested on a written exam and a forest site evaluation.

Held at the West Virginia University's Jackson's Mill State 4-H Camp, the invitational was sponsored by the Farm Credit System and the WVU Extension Service.

The 2009 national championship continued Alabama's dominance at the competition. Since 1984, Alabama has won 16 national 4-H forestry team championships. This win also marked the eighth time that a Tuscaloosa County 4-H Forestry team has won this honor, the most in the United States.

Precision Ag, Field Crops Conference Set Dec. 8

The Alabama Cooperative Extension System, the Alabama Agricultural Experiment Station and other cooperating partners will host the fourth annual Precision Agriculture and Field Crops Conference Tuesday, Dec. 8, at the Wind Creek Hotel in Atmore.

The conference will feature precision agriculture exhibits, equipment demonstrations and educational sessions in which producers can learn about section control technology, economics of precision agriculture, soil fertility applications, continuously operating reference stations, or CORS, for agriculture and other precision ag topics.

The conference starts at 8 a.m. with registration and equipment demonstrations. The educational sessions begin an hour later, at 9 a.m., and wrap up following afternoon workshops on managing and using precision ag data. A session is also being developed for livestock producers on using precision agriculture in pasture management.

The conference is free and open to everyone, and lunch will be provided. For more information, visit the Precision Ag Web site at www.alabamaprecisionagonline.com, or contact Shannon Norwood, regional Extension agent in north Alabama and conference chair, at 256-353-8702, ext. 28 or hubersr@aces.edu. For planning purposes only, Norwood requests that those who intend to participate in the conference contact her by Dec. 1.

In addition to ACES and the AAES, partners for the event include the Alabama Farmers Federation, Auburn University, University of Florida Extension, Natural Resource Conservation Service, Alabama Association of Conservation Districts and USDA's Agricultural Research Service.

TALKING POINT—Scientists at the Indian Agricultural Research Institute in New Delhi, India, listen as Alabama Cooperative Extension System entomology specialist Kathy Flanders, facing front at left, responds to a question. Flanders, along with Extension grain crops and precision ag specialist Brenda Ortiz, facing front center, and Extension agronomic crops and entomology specialist Ayaanava Majumdar, right, visited the institute during a two-week trip to India in August funded by a York International Scholars Program award. The three traveled to India to discuss areas of potential collaboration in research and Extension programs with faculty at the institute and at Punjab Agricultural University in Ludhiana, India.

calendar of events

• October 2009 •

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				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
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• November 2009 •

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• December 2009 •

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27	28	29	30	31		

Oct. 15

Fall Fruit Harvest in Alabama Workshop
Chilton Research and Extension Center
Clanton
3 p.m.

This workshop will include tours of research plots where studies are under way on muscadine and bunch grapes, kiwifruit, satsumas, Oriental persimmons and fall blackberries. Speakers at the event will address such topics as satsuma mandarin production, growing muscadines and bunch grapes in Alabama, the health benefits provided by various fruit crops, producing blackberries in high-tunnel structures and Oriental persimmon production in Alabama. Preregistration is requested.

Contact: Donna Daniels at 205-646-3610 to preregister; Elina Coneva at edc0001@auburn.edu or 334-844-7230 for program information

Oct. 20-22

Sunbelt Ag Expo
Moultrie, Ga.

This event is the Southeast's premier farm show.

Visit: www.sunbeltexpo.com/

Nov. 7

30th Annual Ag Roundup and
Taste of Alabama Agriculture
Ag Heritage Park
Auburn
9 a.m.

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

Nov. 12

6th Annual Henry P. Orr Memorial Golf Classic
FarmLinks Golf Club at Pursell Farms
Fayetteville
9 a.m. registration; 10 a.m. shotgun start

All proceeds from this golf tournament support the Henry P. Orr Endowed Fund for Horticultural Excellence at Auburn University. This tournament is a tribute to Orr and generates funds for educational opportunities beyond the classroom for students in the horticulture department at Auburn University. Various levels of sponsorship are available, ranging from $250 to play to up to $3,000 to sponsor the dinner. To date, $76,000 in funds has been raised by this tournament.

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

Nov. 13

Caregiving 101
Renaissance Montgomery Hotel and Spa
Montgomery Civic Center
Montgomery
8:30 a.m. - 2 p.m.

This event, sponsored by the Auburn College of Human Sciences's Women's Philanthropy Board, features a seminar and luncheon focusing on caregiving issues.

Contact: Sidney James Nakhjavan at 334-844-3524 or wpbchs1@auburn.edu

WHAT A DEER—Holly Ward, left, an animal sciences sophomore and an employee at All Creatures Veterinary Clinic in Auburn, holds a fawn named Hunter while new animal sciences students, from right, transferring sophomore Challise Shirley and freshmen Mallory Campbell and Lauren Sogard admire the 3-month-old orphaned baby doe. Hunter was on campus to share the spotlight in animal sciences professor Dale Coleman's orientation to animal sciences class with two Southeastern Raptor Center hawks, a Lee County Humane Society pup named Pete and, from Storybook Farm, a Lee County equine-based therapeutic care program for children, a Shetland pony dubbed Stuart Little. Every fall, Coleman spends one class session emphasizing the importance of students' involvement in the local community and illustrates that by bringing in representatives, both human and animal, from operations that rely heavily on student volunteers. Dr. Kim Bond, veterinarian at All Creatures (Hunter's temporary home), has a state permit to rehabilitate wild animals for release back into the wild, and a majority of her "clients" are whitetail fawns—as many as 30 rescued fawns a year—that, among other needs, must be bottle-fed. Coleman's class has been a significant source of volunteers for the agencies through the years.

Recipe File

Sweet!

Sweet Potatoes, that is…

THOSE WHO HAVE EATEN THEIR way through Ag Roundup/Taste of Alabama Agriculture, an annual Auburn University homecoming tradition, knows it's a delicious event. And for the last 15 years, maybe longer, Department of Horticulture research associate Bryan Wilkins has been helping cook one of the event's most popular food items—Auburn's own sweet potato chips.

According to Wilkins, you don't have to wait until Roundup to eat them. All you need are sweet potatoes (scrubbed to remove any residual soil), canola oil, seasonings and a good frying pan or pot.

Slice the potatoes as thinly as possible (a food processor may help with this) and soak them at least eight hours or overnight in water in the refrigerator. This pulls starches from the potatoes so they don't stick together in the frying oil. Drain as much of the water from the chips as possible, then drop them into hot canola oil until they turn golden brown and begin to float. Remove them from the oil, blot them dry, then sprinkle them with salt or other seasonings. (Wilkins uses iodized salt or cajun seasoning for a little extra kick.)

The cooked chips keep quite well in resealable plastic bags, so fry up some for now and later. And remember, sweet potatoes are high in nutrients and fiber and have significant antioxidant and anti-inflammatory qualities, so they are actually good for you. Plus, they are the perfect Auburn chip…they are orange, after all.

If you want to try Wilkins's chips, come to Ag Roundup and Taste of Alabama Agriculture on Nov. 7 at Ag Heritage Park (story on page 3).

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