



'We Are Blessed'

Monks Family Says Eli, Lilly Right Where They Belong

by JAMIE CREAMER



ALL IN THE FAMILY—At left, agronomy and soils professor Dale Monks, wife Terri and the kids pose for a family photo on the steps and porch of the schoolhouse where Mrs. Monks home-schools her four children, including, sitting in their parents' laps, Lilly and Eli, both 6, and, standing, Molly, 11, and Maggie, 18. Above, Lilly and Eli, born two days apart, have a blast at Ag Roundup 2009. The Monks adopted Lilly in September 2005, when she was 10 months old; Eli was 5 when he joined the family in September 2009. This was his inaugural Roundup, and he celebrated by treating himself to a hot, deep-fried corn dog. In adopting the two Chinese foster children, the Monks fulfilled a long-time dream.

per-family policy, countless female infants have been neglected, abandoned or worse.

When Molly was 3, the Monks set out on the long and winding road to adoption.

With the help of an international adoption agency in Birmingham, the Monks worked their way through 18 months' worth of paperwork mountains and endless rolls of red tape on both sides of the Pacific. In the summer of 2005, they learned they had a new baby girl, and shortly thereafter, the agency e-mailed them a picture of the baby, whom they had named Lilly Frances.

"We were really excited about getting the picture," Monks recalls. "But the thing is, in Society Hill, your only choice is a dial-up modem, which, I don't know if you remember dial-up modems, but they're slow. So here the four of us are, hovering around the computer, and then we see a little bit of hair, and then a forehead, and a while later came her eyes..."

"And all of us were saying, 'Please, don't anybody call us right now! Please don't let that phone ring!'" Maggie adds.

The adoption was finalized in September, and little Lilly was officially a Monks.

It wasn't the luck of the draw that brought Lilly into the Monks' lives, Mrs. Monks says.

"It's been evident from day one that Lilly is exactly where she was meant to be," Mrs. Monks says. "That our file was on top when Lilly was brought into the room (in China) was God's plan."

And apparently, that Plan had a Part B: Eli.

"When we started the adoption process the second time around, the wait for a healthy baby

(continued on page 2)

FOR THE FIRST FOUR years and 10 months of his life, his name was Guan Yong, and he was a foster child in his native Dongguan, a highly industrial city of seven million people located in southeast China's Guangdong Province.

But in September 2009, Yong was blessed with a family, and his world changed forever. Now, his name is Elijah Dale Monks, he lives in Society Hill, Ala., population 1,400 if you include the neighboring community of Little Texas, and in a home that's brimming over with love, patience, happiness and, above all, faith.

Eli is Dale and Terri Monks' fourth child—and only son—in a brood that also includes 18-year-old Maggie and Molly, 11, the Monks birth children; and Lilly, 6, who was 10 months old when the Monks adopted her from China's Szechuan Province in September 2005. What's fascinating is that Lilly was born on Nov. 2, 2004, and then, two days later and three provinces south of Szechuan, Eli entered the world.

"We think that's pretty amazing, that they're so close together," says Monks, row crops professor in the College of Agriculture's Department of Agronomy and Soils at Auburn and cotton specialist for the Alabama Cooperative Extension System. "It's beneficial from a developmental standpoint, but what's really great is how close the two of them are. I think Eli would've had a lot harder time adjusting if Lilly hadn't been here."

Those who don't know the Monks may wonder what on earth prompted the family to go through the long, complicated, costly and often-frustrating international adoption process, not once, but twice, and to take on the trials and challenges and risks that adoption, especially of children from halfway around the world, can pose.

Those who *do* know the Monks, however, and their servant hearts, know that, truly, it wasn't *anything* here on earth.

"One of the Bible verses that has always meant a lot to me is James 1:27, where it says pure religion that's acceptable to God is this: to look after orphans and widows," Mrs. Monks says. "For us, it's just something that's always been there."

By "always," she means since early in the couple's romance. The Monks met in 1981 at Middle Tennessee State in Murfreesboro, where Monks, a farm boy from Fayetteville, Tenn., was majoring in plant and soil science, and his future bride, who hailed from a few miles north of him in Shelbyville, was an accounting major.

The couple married in 1983, shortly after Monks earned his bachelor's degree, and headed west, to Fayetteville, Ark., and the University of Arkansas where, in 1985, he received a master's degree in weed science and she was awarded her bachelor's. He earned his Ph.D. from the University of Georgia in 1990.

Though both were crazy about, and marvelous with, children, the Monks had resolved not to start a family until he had his doctorate. That's why they'd been married nine years, just before he joined the Auburn faculty, when daughter Maggie was born. Molly came along in 1999. Life was a genuine joy, every day a celebration of it, but the Monks' commitment to care for orphans was as strong as ever.

"From early in our marriage, our thoughts and hearts had always centered on adopting a Chinese baby girl, given their terrible plight with the government's one-child policy," Monks says.

In Chinese culture, males long have been the infants of choice. In the years since 1979, when the government established a one-child-

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View from AGhill



December marks the end of my first six months as dean of the College of Agriculture and director of the Alabama Agricultural Experiment Station. I have spent much time touring our experiment station centers, evaluating departmental programs, getting to know our faculty and staff and visiting with countless alumni and friends. We have an impressive group of faculty and staff who work hard every day to serve our stakeholders. We also have a very passionate group of alumni and friends who have provided funds to support scholarships, professorships, building projects and other projects this

year. I am grateful for all you do to support our important work.

We have had many things to celebrate this year. We awarded nine new professorships throughout our college to recognize and reward the out-

standing accomplishments of our top faculty. We hosted two York Lecturers, including Fritz Haeg, who discussed alternative gardening ideas, and Valentin Abe, who spoke on his project to teach the people of Haiti how to grow fish for food and economic development.

We have raised enough funds to initiate the construction of a new Poultry and Animal Nutrition Center, which will give us the most modern teaching and research facility in the Southeast. Biosystems engineering department head Steve Taylor received approximately \$4.5 million in grant funds from the National Science Foundation to renovate the Corley Hall annex for much-needed modern laboratory space. Construction on the North Auburn Aquatic Resources Center is progressing well, with a target completion date of summer 2011. A project at the Tennessee Valley Research and Extension Center, funded by Alfa, is progressing well and is nearing the bidding stage. Finally, Dr. John Liu received a grant for approximately \$29 million for the construction of the Center for Advanced Science, Innovation and Commerce building. Construction will likely begin summer 2011. This facility will house faculty conducting multidisciplinary research in renewable energy, food safety, genomics and water resources.

These are amazing accomplishments in a time when the state budget news is seldom good. I am thankful to all of you who worked hard to ensure that we continue to attract the best students through scholarships, recognize and reward our faculty for their accomplishments through professorships and who support the development of critical infrastructure needed to ensure that our agricultural programs remain at the forefront. I wish you all the best over this holiday season.

Bill Batchelor

DEAN, COLLEGE OF AGRICULTURE
DIRECTOR, ALABAMA AGRICULTURAL EXPERIMENT STATION

(“WE ARE BLESSED,” from page 1)

girl was three to four years,” Monks says. “We didn’t want to wait that long, so we indicated to the agency and the Chinese government that we’d consider a girl or a boy, or an older child, or a special-needs child.”

And to make a long and amazing story short, that’s how Guan Yong, then 4, became Eli Monks. Born with a cleft palate, he had been placed on the special-needs list of adoptees. Again, it wasn’t happenstance that Eli finally made it to the top of the list precisely as the Monks moved to number one on the waiting list. As Mrs. Monks says it was another case of meant-to-be.

Eli’s palate was repaired before he left China; he will have surgery within the next year to have a bone graft placed in his gums. Mrs. Monks homeschools all four kids, but currently, Eli spends much of his classroom hours with a speech therapist.

Because Eli lived in China for almost five years, his transition to a new life has been far more challenging for the Monks than was the case with Lilly—especially in the realm of communication. How, for instance, do you make a child who knows no English understand that he has a new name? The Monks handled it this way:

“Yong was his given name, so we called him Yong until we got home to try to lessen the confusion,” Monks says. “After a few days, we started calling him ‘Yong Elijah’ to try to link the two names, and finally we were able to drop the Yong.”

Overall, though, Eli has adapted to his new world remarkably well.

“As soon as he walked in the door here for the first time, it was like he knew he was home,” says Mrs. Monks. But Lilly distinctly remembers another detail from that first day.

“He ran right in and started playing with *my* toolbox,” she says with a scowl, to which dad notes, “We did have to go through a dethroning process.”

Though Eli’s all boy, Mrs. Monks says he’s also a “cuddler.”

“He’ll crawl up in your lap and almost melt into you,” she says. “It is wonderful.”

During Eli’s first few weeks and months in his new home, Mrs. Monks says she’d often wake up in the middle of the night and see Eli, standing at his parents’ bedroom door

“He never would make a sound,” she says. “He’d stay for a little while, and then go get back in his bed. I think he just wanted to make sure we were still there.”

The Monks say there are two reasons why expanding the family has gone so smoothly and been so successful. Their names are Maggie and Molly,

“They’re the ones who have held everything together,” Mrs. Monks says. “These girls have the heart for this.”

Obviously, international adoption is not for everybody, but Mrs. Monks has sound advice for families considering it: “Think long,” she says, “and pray hard.”

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Learning Communities

Where Belonging Begins!

by KATIE JACKSON

Freshmen—those fresh-faced, eager young people who arrive on the Auburn campus in droves each fall—may look like they have the world by the tail, but many struggle through their first year of college, and far too many drop out of school.

Auburn University and the College of Agriculture are trying to help those freshmen become sophomores, juniors, seniors and alumni through special groups called learning communities.

“We know that going from high school to college is a big transition,” says Paul Patterson, associate dean for instruction in the College of Agriculture. In fact, many freshmen nationwide don’t make it through their first year of college for a variety of reasons—from homesickness to poor grades to financial problems.

“We are trying to improve the freshmen retention rate at Auburn by giving students an opportunity to enhance their study skills and better understand the university system, but also to develop a social network,” he adds.

Learning communities consist of small groups of students, typically 20-25 per group, who have similar interests and/or majors and take classes together for their first two semesters. Auburn University began offering a few learning communities in 1998; now there are 42 learning communities available across campus.

The College of Agriculture currently offers three learning communities. Two—Leading the Way in Agriculture and College Life Agri-life—are general interest groups open to students from any major in the college. The other is a Pre-Veterinary Medicine learning community designed specifically to help students who hope to apply to veterinary college.

Suzanne Shaw, academic adviser for the College of Agriculture and the college’s learning community coordinator, started the first College of Agriculture learning community, made up of 16 animal sciences/pre-vet students, in 2002.

“It was a very good group and a lot of them went on to do great things,” she says. Of that class, four went to graduate school, three to veterinary college and one to pharmacy school. Three became Ag Council presidents, three were Ag Council vice presidents, five became Ag Ambassadors and many became officers for the Ag Ambassadors and other clubs.

“We saw the success from that first year so we continued it and added a general learning community the next year,” she says. This fall 92 freshmen in the College of Agriculture (out of 221 incoming freshmen) joined a learning community.

These students took a two-hour class—Success Strategies—that is taught by the College of Ag professors who lead each learning community. The students were pre-enrolled in two core courses (history, sociology, biology, chemistry and the like), which helped ensure they got into some of the core courses required for their degree.

A community service project is also required for the students and this year has included such activities as volunteering at a local food pantry, animal shelters, the Southeastern Raptor Center and a therapeutic riding stable.

This spring the students will be pre-enrolled in two more core classes and encouraged to take Introduction to Agriculture, a class that introduces them to the variety of career options available with an agriculture degree.

“We want to encourage them to think about their career objectives and how their major will help them achieve those goals,” says Patterson.

Dave Williams, head of the Department of Horticulture who is teaching the Leading the Way in Agriculture learning community this year for the first time, says the small size of his class, 22 students, allows him to really get to know and stay connected to his students.

“That close contact and trying to nurture them along and help them feel grounded is important,” Williams says.



Tracy Collier Cline, a student adviser in fisheries and allied aquacultures who is helping Williams with his learning community class and has been teaching learning community classes for four years, believes strongly in the value of learning communities.

“You have an instant group of fellow students to study with, discuss classes, hang out with; thus, as a freshman, you don’t feel so ‘lost.’ Learning communities provide a ‘small college experience’ within a very large university,” she says.

Wayne Greene, head of the Department of Animal Sciences, leads the college’s two Pre-Vet learning community sessions and is doing so the first time this year.

“In many cases outstanding high school students have not had to develop the study habits needed to be successful in college,” says Greene.

COMMUNITY CLASSES—This fall four learning community classes were taught that focused on success strategies. Faculty members in the College of Agriculture led the classes, such as the one taught by Wayne Greene, head of the Department of Animal Sciences (above) that helps the students prepare for the classwork and studying they will face in the future. Members of other learning community classes also help lead the classes (upper right), which gives the students experience in making presentations while also addressing concepts that can help freshmen with everyday issues, such as living on a budget.


Greene thinks the learning community experience is definitely helping students overcome those challenges, especially for students wishing to enter an advanced professional program (such as pharmacy, veterinary medicine and graduate school) in the future.

But it’s not just faculty and staff who see the value of learning communities. Students recognize it as well.

“When I started school at Auburn I didn’t know anyone,” says Candace Bryant, who was in the very first 2002 College of Agriculture learning community class. “I also had a hard time adjusting to life away from home and studying for college level classes.”

“For me the learning community was much more than a couple of classes and some study partners. It became my cure for the difficult transition between high school and college, and also a sympathetic network to support me throughout my time at Auburn University,” she adds.

“The learning community truly had a profound impact on my career as an Auburn student,” says Meaghan Gonsalves, who was in the 2006 learning community class. “It taught me what it takes to be a successful student, gave me lasting friendships and memories, and it aided me in finding my niche and place here at Auburn.”

To learn more about the college’s learning communities, visit www.ag.auburn.edu/adm/student/prospective/life/community.php. Applications for the fall 2011 learning communities will be accepted beginning in late January 2011. 

Belize Study Abroad Opportunity Available to Graduate Students



A month-long study abroad opportunity to be offered this summer in San Ignacio, Belize, is available to graduate students in the College of Ag and other students across the AU campus.

Wes Wood, Auburn University professor of agronomy and soils, and Ed Boles, professor of aquatic ecology at the University of Belize, will co-teach the class, which will focus on the study of soil carbon sequestration in Belizean agroecosystems and watershed ecosystems.

Coursework will explore the importance of standard assessment, monitoring and management of watersheds and the necessity of community involvement.

The course will be taught June 3 through July 11, 2011, and will include field trips, lectures and laboratory work. Classes will take place during the week, leaving students the weekends to tour Mayan ruins, the rain forest, coastal barrier islands/reefs and other natural and cultural sites in Belize. Opportunities also will exist to interact with students from other universities.

Estimated cost for the trip is \$4,500, which includes the airline ticket, transportation to and from the airport, classes and excursions. All accommodations are covered and some meals. A study abroad fee of \$446 will also be charged in lieu of tuition, though graduate students with a tuition waiver will not pay the study abroad fee.

For more information contact Wood at 334-844-3997 or woodwes@auburn.edu.

Gone Global: AGazine Student Blog Getting International Attention



The College of Agriculture student blog, AGazine, launched at the end of September, is thriving and, as of press time for this issue of Ag Illustrated, has had more than 200 visits from several countries and nearly two dozen U.S. states.

Recent blog entries include: the need for leadership roles in college, the National FFA Convention, genetically modified vs. organic foods, eminent domain, personal reflections, internship and traveling experiences and farmers markets.

The blog staff, which currently includes four undergraduates and one alumna, volunteer their time to write for AGazine so that readers can see college-student perspectives on current agricultural issues. The writers' backgrounds are as diverse as the entries. Some come from small-town agricultural/farming backgrounds and others from big cities with no background in farming.

AGazine operates under the guidance of the Office of Ag Communications and Marketing in collaboration with the Agricultural Communicators of Tomorrow student organization and can be found online at <http://wp.auburn.edu/AGazine>. For more information about the blog, or to suggest future topics for the bloggers to write about, send an email to agcomm@auburn.edu.

Faculty and Staff Accomplishments



Valentina Hartarska

Valentina Hartarska, associate professor in the Department of Agricultural Economics and Rural Sociology and an associate researcher with the Center for European Research on Microfinance in Brussels, recently participated in a research seminar and matriculation/graduation ceremony held at the University of Mons, Waroque Business School in Belgium. Hartarska was also part of a group that met with the 2006 Nobel Peace

Prize winner and founder of the Grameen Bank in Bangladesh, Muhammad Yunus, to discuss the state of microfinance and social enterprise development.

Wheeler Foshee, associate professor of horticulture, has been honored with an Alumni Association Undergraduate Teaching and Excellence Award.

Biosystems engineering associate professor **Puneet Srivastava** and collaborators at Auburn and at universities in Georgia and Florida have been awarded two National Oceanic and Atmospheric Administration grants totaling more than \$4.3 million to help reduce climate risks in the Southeast.

Nannan Liu, professor in entomology and plant pathology, along with a group of national and international researchers, published the research of the mosquito *Culex quinquefasciatus* genome sequence in Science magazine. The research offers a reference genome from the third major taxonomic group of disease-vector mosquitoes and establishes a platform for mosquito comparative genomics.

Nada Nadarajah, research associate in animal sciences, received a \$20,000 grant for 2011 from the AAES Hatch Funding Program for the project titled "Explore the underlying genetic variation in meat goats for resistance to gastrointestinal parasites to aid in selection."

Elina Coneva, assistant professor in the Department of Horticulture, along with other specialists from Auburn, LSU, Mississippi State, North Carolina State and USDA's Agricultural Research Service, have developed a new branch of the eXtension website specifically about blueberries at www.eXtension.org/blueberries.

Oladiran Fasina, associate professor of biosystems engineering, was awarded a travel grant sponsored by the Auburn University Provost's Office and the Transatlantic Climate Bridge Network. He will use the grant to travel to Germany to meet with energy and sustainability leaders in government and academia.

Iwona and **Jacek Wower**, both from the Department of Animal Sciences, have discovered how a small ribonucleic acid molecule called tmRNA rescues ribosomes, the protein factory of all living organisms. This finding is a result of a three-year collaboration between researchers at Auburn University and Columbia University. The article is published in the European Molecular Biology Organization Journal (www.nature.com/emboj/journal/vaop/ncurrent/full/emboj2010255a.html).

Alan Wilson, assistant professor in fisheries and allied aquacultures, has been awarded a \$292,141 grant from the National Science Foundation's Research Experiences for Undergraduates program to establish a summer research project that will bring students from universities across the nation to Auburn to participate in mentored, independent research in warm-water aquatic ecology. He also is part of a research team that has been awarded a \$385,000 grant from the Great Lakes Fishery Trust to enhance and protect the fish population in Lake Michigan.



Henry Fadamiro

Henry Fadamiro, associate professor of entomology and plant pathology and integrated pest management coordinator for Alabama, and a team of specialists with the Alabama Cooperative Extension System have been awarded a three-year, \$921,360 grant by the USDA/NIFA to support research and extension activities aimed at promoting integrated pest management in Alabama.

James L. Novak and **Denis Nadolynyak**, both faculty members in the Department of Agricultural Economics and Rural Sociology, published an article in the 2010 Journal of the ASFMRA entitled "Climate Effects on Rainfall Index Insurance Purchase Decisions."

Conner Bailey, professor of rural sociology, served as panel manager for the National Institute of Food and Agriculture's Foundational Program "Prosperity of Small and Medium-sized Farms and Rural Communities" held in October in Washington, D.C. The panel made funding decisions for \$7 million in grants. This was Bailey's second year serving as panel manager.

Russ Muntifer, professor of animal sciences, and **Art Chappelka**, professor of forestry and wildlife sciences, co-authored an article published in the Journal of Integrative Plant Biology titled "The ozone component of global change: Effects on agricultural and horticultural plant yield, product quality and interactions with invasive species." The article was chosen as the journal's Best Expert Review Article.

Student Accomplishments

Nathan Warner, a biosystems engineering student, received a \$500 scholarship sponsored by the Auburn University Provost's Office and the Transatlantic Climate Bridge Network. The award is part of a competition held during Climate and Energy Campus Week in early October for which faculty and students submitted entries on how their work promotes a sustainable future. Warner is very active in campus sustainability activities and is currently serving as the president of the Auburn Sustainability Action Plan student group. He also serves in leadership roles in the SGA and the Committee of 19.

April N. Maxwell, a sophomore from Satsuma majoring in agronomy and soils, recently won the American Society of Agronomy Cross-Cultural Experience Program Scholarship, a \$2,500 award given to an undergraduate student majoring in soils, crops or agronomy to learn about agricultural sciences from an international perspective.



Poultry Science Club member works with students at Nehemiah Center.

The Poultry Science Club recently visited an after-school program at the Nehemiah Center in Montgomery for the second year. Since their visit last year, the center started its own backyard chicken coop to give the children the experience and responsibility of taking care of a flock of chickens. The club also provided the children with several hands-on experiences and gave them posters with additional poultry and egg information. A slideshow of the Poultry Science Club's visit can be found at www.photoshow.com/watch/Uv9VT9Bm.

Elizabeth Simmons, a freshman in ag communications, attended the 2010 Agriculture Future of America Leaders Conference in Kansas City, Mo. (<http://agfuture.org/2010/index.html>). Her blog posting about the experience can be found in AGazine, the College of Agriculture's student blog, at <https://wp.auburn.edu/AGazine/>.



MR. AND MS. AG ANNOUNCED—Laura Macedonia and John Starnes, both seniors in the College of Agriculture, were winners of the first-ever Mr. and Ms. Agriculture contest, a new event organized by the Agriculture Council student organization to raise money for the Beat Bama Food Drive. Six female and six male College of Ag seniors were nominated to compete in the contest. During homecoming week, students, faculty, staff and friends could donate money in the name of their favorite candidate and the guy and girl who garnered the most donations during the week won the titles of Mr. and Ms. Agriculture. All the money they raised—\$571.22—was donated to the East Alabama Food Bank to help with the campus-wide Beat Bama Food Drive. Macedonia and Starnes are both majoring in animal sciences.



WHAT A VIEW, WHAT A DAY—Win or lose, those who played in the seventh annual Henry P. Orr Memorial Golf Classic held back in November probably had a wonderful day simply enjoying the beautiful fall views at FarmLinks Golf Club at Pursell Farms in Fayetteville. Money raised through the tournament helps support the Department of Horticulture's Henry P. Orr Endowed Fund for Horticulture Excellence.



TOP FACULTY—Several College of Agriculture faculty members recently earned top awards from the college and the Alabama Agricultural Experiment Station in recognition of their outstanding efforts in teaching, advising, research and grantsmanship. They are, pictured from left: Dale Coleman, animal sciences professor who won the 2010 Dean's Award for Teaching Excellence; David Weaver, professor in the agronomy and soils department who won the 2010 Dean's Award for Advising Excellence; Eric Peatman, assistant professor in fisheries and allied aquacultures who won a Grantsmanship Award; Alan Wilson, assistant professor in fisheries and allied aquaculture, winner of the 2010 Junior Researcher Award and a Grantsmanship Award; and David Held, assistant professor of entomology and plant pathology who was also a Grantsmanship Award winner. Not pictured are Grantsmanship Award winners LaDon Swann, associate research professor of fisheries and allied aquacultures, and Puneet Srivastava, associate professor of biosystems engineering; and Allen Davis, professor of fisheries and allied aquacultures, who won the 2010 Senior Researcher Award; and Yifen Wang, associate professor in biosystems engineering, who was awarded the Guthrie Award for Achievement in International Agriculture. More information on these winners and other awards is available at www.ag.auburn.edu/adm/faculty-staff/.



OUTSTANDING STAFF—Five staff members from the College of Agriculture and Alabama Agricultural Experiment Station were honored recently with annual Employee of the Year awards. They are, from left: Anita Robinson, accountant in agricultural economics and rural sociology; Deborah Solie, student services coordinator; Scott Parsons, assistant director of fiscal administration; Kay Holloway, administrative support staff in agronomy and soils; and Kathryn Glass, natural resources program adviser in agronomy and soils. Solie also received the first-ever Diversity Award, which is given in recognition of staff and administrative and professional employees who have exhibited outstanding commitment to diversity in their performance, service and collegiality in the workplace.

Agronomy and Soils Distance Ed Program Announces Spring Class Offerings

The Auburn University Department of Agronomy and Soils is offering six online courses spring semester 2011 through its advanced-degree distance education program, in which individuals can either take single refresher courses or enroll in a graduate program to pursue a master of agriculture or a master of science degree in agronomy and soils.

The list of spring courses includes basic crop science, basic soil science, turfgrass management, plant genetics and crop improvement, bioenergy and the environment and soil microbiology, a course that has a required lab.

The department launched the distance education program three years ago to provide professionals in such fields as agriculture, environmental management, turfgrass and golf course management and agribusinesses and those with federal and state agencies including the Alabama Cooperative Extension System and the Natural Resources Conservation Service the opportunity to take classes and earn advanced degrees while working.

Tuition for online courses is \$292 per credit hour for undergraduate-level classes and \$330 per credit hour for graduate courses. Spring semester classes begin Jan. 10, 2011. For more on the program, including how to register, visit www.ag.auburn.edu/agrn/distancelearning, or contact Megan Ross at mhr0001@auburn.edu or 334-844-3201.

Farming Sustainably

Heifer's Carbon Hoofprint

Auburn Researchers Study Nonprofit's Impact on Environment by JAMIE CREAMER

Since 1944, the nonprofit association Heifer International has worked to end hunger and poverty by providing gifts of livestock and plants, along with training in sustainable agricultural practices, to the poorest of the poor in countries around the world. Now, the organization wants to measure its effect on the environment—its carbon hoofprint, so to speak—and has called in a team of Auburn University soil scientists and water-quality experts to find the answers.



The research team for what is called the Heifer Healthy Hoofprint project includes, from agronomy and soils, profes-

REALLY DIGGING THE SOIL—Brenda Wood, agronomy and soils research associate at Auburn, pounds a 15-pound soil-sampling-collection tool into a field on a Lithuanian farm that has received a farm animal from Heifer International. Wood and Jamey Oates, research technician with Alabama Water Watch, will be collecting soil samples from eight countries around the world in the coming year. Four years from now, they will repeat the process in the exact locations, thanks to GPS technology. The goal of the project is to compare 2010-11 soil-test results to those from the 2014-15 collection to determine Heifer International's "carbon hoofprint." Wes Wood, Auburn soil scientist and carbon sequestration expert, heads up the project, with Bill Deutsch, a fisheries department research fellow and director of both the Alabama and the Global Water Watch programs, as co-investigator.

sor Wes Wood and research associate Brenda Wood and, from fisheries and allied aquacultures, research fellow Bill Deutsch and technician Jayme Oates.

"Heifer basically wants to know the program's impact on soil carbon sequestration, whether farms that have received livestock from Heifer are adding carbon to the soil, or depleting it," says Wes Wood, an Alabama Agricultural Experiment Station veteran who for 25 years has focused much of his research on carbon sequestration.

In this first year of Hoofprint, the Auburn researchers will collect and analyze in depth hundreds of soil samples from Heifer-assisted farms in eight countries on five continents. They will repeat that process in 2014-15 and compare data to determine which directions carbon levels are heading. And between the sampling years, Deutsch, director of both Alabama Water Watch, a community-based water-monitoring program, and Global Water Watch, which was modeled after the state program, and Oates will teach farm communities in which Heifer has a presence how to monitor, harvest and manage their water resources. The Woods will instruct farmers in collecting soil samples and in-country labs in the soil-analysis procedures used in the Auburn lab so that soil carbon sequestration testing in future years will remain consistent.

Hoofprint kicked off in Auburn in September, when Brenda Wood, who supervises the environmental soil science lab that will process the samples collected in the study, and Oates traveled to the Baltic States and spent 12 chilly, overcast and often rainy days gathering soil samples from a total of eight farms in Estonia, Latvia and Lithuania. The two will tell you quickly this was no vacation.

"It was pretty hard work," Wood says, and she doesn't speak in jest, unless you consider hammering 15-pound soil sampling extraction tools into often-rocky ground over and over and day after day a great getaway.

In the Baltics, Wood and Oates, accompanied by a Heifer staff member there, visited four farms in Lithuania and two each in Latvia and Estonia, and at each farm, the routine was the same. They would lay a 60-meter transect line per field on the farm, place flags every 15 meters on the line and then, following established soil-sampling protocols, collect two soil core samples at each flag, one 0-10 centimeters in depth and the other 10-20 centimeters below the surface. The first set of core samples is being analyzed for nutrient content and carbon levels; the second set will be used to assess soil bulk density, a measurement essential for calculating carbon sequestration over a larger area.

"It took us two and a half or three hours at every farm, and we'd come out with about 15 pounds of soil," Wood says.

When the two flew into Atlanta Sept. 23 with 150 pounds of Baltics soil divided among four duffle bags and two crates in checked baggage, they discovered that while they were gone, federal regulations had changed such that no one could bring more than 15 pounds of foreign soil into the U.S., and only

in carry-on baggage. Under the circumstances, officials did give them a one-time exemption from the regulation.

The research team now is working to reformulate its soil-shipping plan because in early 2011, Wood and Oates will be off to collect year-one soil samples from Heifer program farms in Tanzania and Kenya, and, later in the year, they will do the same in Indonesia and Ecuador. That makes a total of

seven countries; the eighth is the U.S., and the sampling site will be in Little Rock, Ark., where Heifer International is based.


The first year of research at Auburn is being supported by a \$130,000 grant from Heifer International, an organization not known as a granting agency.

"We are serious about having this data," says Heifer learning resources manager Shae Simoneau. "We want to be able to demonstrate that Heifer not only empowers people to become self-reliant but also, through the agroecological farming systems we promote, improves the environment."

Simoneau is also manager of the Heifer Healthy Hoofprint project, which actually began in 2008. Heifer's original plan was to have scientists within the organization conduct the project, and that year, a Heifer employee did travel the globe to collect soil samples from the designated farms in the seven countries. That employee soon left the organization, however, and Heifer officials decided the project should be in the hands of experienced university researchers.

As Hoofprint leader, Simoneau was in charge of finding those scientists. Unfamiliar with the world of academia, she called Auburn's Bill Deutsch, whom she had met at a GWW workshop he was conducting.

"Shae called and asked if I could recommend a top-notch soil scientist who specialized in carbon sequestration," Deutsch says, "and I said, 'Why sure; we have one of the best right here at Auburn.'" Wes Wood readily signed on to the project.

Simoneau says Heifer is working to secure sponsors for Hoofprint's final three years. 

Study: Trees, Lovely Landscapes Can Help Cities Boost Tourism

Cities and communities looking to attract tourists—and tourists' dollars—to their lovely towns might want to consider investing in trees.

Granted, trees alone won't lure tourists to a community en masse. But in a just-completed Alabama Agricultural Experiment Station-funded study at Auburn University, Yaoqi Zhang, who specializes in the social economics of forestry at Auburn, and horticulture faculty Jeff Sibley and Carolyn Robinson found that tourists are most attracted to, and most likely to revisit and recommend, cities with well-designed landscapes that showcase lots of lovely trees.

Among the almost 400 people the scientists surveyed, 80 percent rated city beautification as important or very important to tourism development, and they identified city parks, green spaces and attractive landscaping that includes

"the right trees in the right places" as essential to a positive image of a city. As for the "right" trees, respondents said all trees should be selected based on, in order, their seasonal color, symbolism to a town, species and shape.

Zhang, who led the project, says the scientific data on the value of urban trees and striking landscapes to a community can serve as a proven resource for city and community leaders in their municipal budget deliberations and when dealing with competitive land-use and other such issues.

Meanwhile, Zhang and West Virginia University faculty member Jinyang Deng currently are conducting a similar study to measure the impact of urban trees on tourism in Savannah, Ga. That project is supported by the National Urban and Community Forestry Advisory Council.



LOVELY AS A TREE—An Auburn University study has found that tourists prefer cities with beautiful landscaping that features lots of trees.

Scientist Finds Glycerin Makes for Effective Pesticides, Herbicides

by JAMIE CREAMER

Sky-high petroleum prices and growing environmental concerns about greenhouse-gas emissions from petroleum-based gasoline have fueled a dramatic increase globally in the demand for and production of biodiesel in the past decade, and that boom has led to a massive surplus of biodiesel production's chief by-product, crude glycerin.

Research at Auburn University shows that the glycerin glut and the subsequently rock-bottom cost of the product could bode well for row-crop farmers in Alabama and beyond, in the form of affordable, petroleum-free pesticides that effectively control weeds, fungi and soilborne insects, particularly crop-destroying nematodes, and that contain only naturally occurring, nontoxic ingredients.

Auburn plant pathologist/nematologist and Distinguished University Professor Rodrigo Rodriguez-Kabana was among the scores of scientists in the U.S. and abroad who, as the glycerin surplus mushroomed in 2004-05, began searching for new ways to use the liquid. He could well be the only one who chose to investigate glycerin's potential as a pesticide.

Early on in the study, the veteran Alabama Agricultural Experiment Station researcher determined that, when applied directly to nematode-infested soil, straight glycerin not only helps suppress certain varieties of destructive nematodes but that it does so without harming beneficial insects that enrich the soil.

From there, he embarked on a long-term trial-and-error process, combining glycerin—which, like petroleum, is a solvent—with a host of key natural compounds, such as mustard oil and almond extract—that science has proven have pesticidal value, and putting those formulations



PUTS TO THE TEST—Rodrigo Rodriguez-Kabana, Distinguished University Professor of plant pathology at Auburn, evaluates the herbicidal capability of a glycerin-based composition he has developed as an affordable, effective biological control agent.

to the test in greenhouse and micro-plot trials.

To date, Rodriguez-Kabana and plant pathology research fellow Lee Simmons have completed 89 nematode and 225 weed trials at the small-scale level and have identified specific formulations that provide excellent broad-spectrum control of nematodes and other soilborne pests as well as other mixtures that are equally effective herbicides and fungicides. Rodriguez-Kabana, who holds several patents on his formulations, says the research now moves to field trials.

Meanwhile, Bob Taylor, the Alfa Eminent Scholar in agricultural economics at Auburn, has analyzed the data and crunched the numbers on Rodriguez-Kabana's formulations and has reported that, based on the ingredients—particularly the glycerin, which biodiesel producers now

sell for pennies per pound—and the production technology, the glycerin-based pesticides would cost substantially less than the petroleum-based farm chemicals available today.

Incidentally, throughout the glycerin research, Rodriguez-Kabana and Simmons have been conducting similar tests with formulations made with biodiesel instead of glycerin and have found that they, too, have strong pest-control capabilities. They would, however, be costlier.

From the get-go of the project, Rodriguez-Kabana's chief concern has been to develop products that are not only effective but safe for people and the environment as well.

“We have concentrated on ingredients that are nontoxic and are things that we already know are safe for humans and for animals,” he says. “These are pesticides that, if you made a mistake using them, you wouldn't die.”

Rodriguez-Kabana says previous experiences in registering products with the Environmental Protection Agency have taught him a valuable lesson.

“Don't use anything weird,” he says. “That can put it in (EPA) limbo and keep it there.”

In 2003, a private chemical company submitted a registration application to the Environmental Protection Agency for a patented pesticide formulation Rodriguez-Kabana had developed as an effective, environmentally safe replacement for the widely-used-but-soon-to-be-banned fumigant methyl bromide. Extensive data showed that the product, a liquid form of sodium azide, not only out-performed methyl bromide but actually improved soil health.

The EPA has yet to register the product.

Rodriguez-Kabana says a private company plans to begin sending data on the glycerin-based pesticides to the EPA in early 2011.

Ag Economist: Fertilizer Cartels Threaten Global Food Supply

by JAMIE CREAMER



A NEW KIND OF DEPENDENCE?—The U.S. will deplete its phosphate rock reserves within 30 years, thus becoming dependent on foreign countries for phosphorus fertilizers that are essential to food production.

Three transnational corporations control the supply, trade and price of phosphorus, a nonrenewable plant nutrient that is essential for food crops and for life, and that market domination could jeopardize food production in the future.

So says Bob Taylor, professor and Alfa Eminent Scholar in agricultural economics at Auburn University, who last year, in response to dramatic increases in phosphorus fertilizer prices in recent years, began examining the global phosphorus market in-depth. His key conclusions—that inputs critical to food production are controlled by a handful of corporate cartels and politically unstable governments and that this poses a serious threat to the food supply and to food security worldwide—are cause for concern.

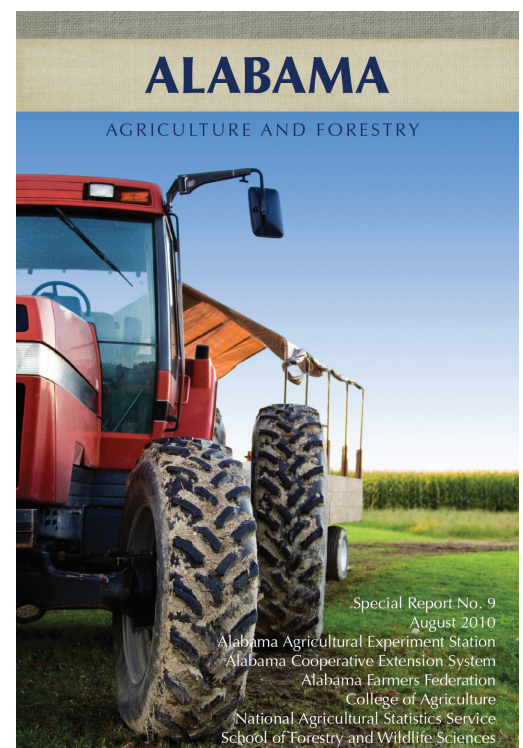
Of those three corporate giants, one is a monopoly authorized by the Moroccan government. The other two have a cartel sanctioned by the U.S. under the 1918 Webb-Pomerene Act, which basically gives them antitrust immunity to set prices above competitive levels. They also have an export cartel sanctioned by the Canadian government. As is true with most cartels and monopolies, these three companies can jack up phosphorus fertilizer prices at will, Taylor says.

“A New York Times writer recently called phosphorus availability ‘the gravest natural resource shortage you've never heard of,’” Taylor says. “The fact is, corporate and political control of essential plant nutrients may be the gravest long-run competition issue you've never heard of.”

“And control of these resources may also be the greatest strategic issue facing the U.S. that you never heard of,” he says.

Though the U.S. has an ambitious plan to replace imported oil with biofuels produced from plant matter, Taylor's analyses suggest that in 10 to 20 years, given the dwindling domestic reserves of the nutrients needed to grow biofuel crops and the political instability in countries where most phosphate rock reserves are held, the U.S. “may be replacing energy dependence with phosphorus dependence.”

In early October, Taylor traveled to Washington, D.C., to present his analyses of what he deems a “grave, unacceptable and highly complex” situation to officials from the U.S. departments of justice and agriculture. He recapped his findings in a sobering article, “Forget Oil, Worry about Phosphorus,” published online in September by The Daily Yonder. To access the article, go to dailyonder.com and search for the keywords “fertilizer cartels.”



JUST THE FACTS—How many dairy farms are in Alabama? What's the average size of an Alabama farm? How many acres in your county are forested? You'll find these and a world of others facts and figures packed into a new pocket-sized booklet simply titled “Alabama: Agriculture and Forestry.” Within the publication's 40 pages, you'll find the most current Alabama crop, livestock and forest data available from the National Agricultural Statistics Service as well as from Alabama Agricultural Experiment Station publications and forest industry resources. Published in September 2010, the attractive booklet is a joint effort of the Alabama Agricultural Experiment Station, Alabama Cooperative Extension System, Alabama Farmers Federation, NASS and Auburn University's College of Agriculture and School of Forestry and Wildlife Sciences. To request a free copy of the publication (AAES Special Report No. 9), call 334-844-5788 or e-mail agcomm@auburn.edu.



Readership Survey

The Office of Ag Communications and Marketing wants to know what you think about Ag Illustrated. We are looking at expanding our presence on the Web, and we want your opinions. Please take a moment and answer the questions below; then mail the survey back to:

Office of Ag Communications and Marketing
3 Comer Hall
Auburn University, AL 36849

You can also fill out the survey online at surveymonkey.com/s/agillustrated.

Thanks for taking the time to let us hear from you!

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(Circle your top five choices.)

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- Activities/research at the AAES outlying units
- News about AAES partners (SFWS, COSAM, CVM, CHS)
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- More text
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- Other (please specify)

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- Associate's
- Batchelor's
- Master's
- Doctorate or other terminal degree
- Professional (M.D., J.D., etc...)

Poultry Farm Managers Honored

Three former managers of the Auburn University poultry farm were honored this fall at a special luncheon hosted by the Department of Poultry Science.

According to Don Conner, poultry science department head, the efforts of James Belcher, Staley Fincher and George Hall helped build Auburn's poultry science department into a nationally recognized program.

Beginning in 1924, 50 egg-laying houses were built at Auburn to support egg-laying contests, which were outreach programs that helped define diets, husbandry practices and breeds that were best suited for egg production in Alabama.

"The egg-laying houses built at Auburn University were the humble beginnings of what has evolved into the Poultry Science Research and Education Center of Auburn's Poultry Science Department," he adds.

In the early 1940s, the Alabama Agricultural Experiment Station and College of Agriculture obtained the poultry facilities and established the current poultry science research farm on the Auburn campus.

"From then to the present, this unit has continued to evolve to address

the research and educational needs of the Alabama poultry industry," says Conner. "The ability of this center to meet these needs has been greatly impacted by the farm managers in charge, and the Department of Poultry Science is greatly indebted to the commitment and leadership of our past farm managers (now known as directors)."

Belcher was farm manager from 1942 to 1959 and was instrumental in establishing the farm as a major research facility in the AAES. From 1959 to 1992, Fincher served as the farm manager and led the effort to relocate the poultry farm to its current site near the Auburn University Technology Park. In 1992, Hall took the reins of the farm and oversaw many of the upgrades to the facilities that continue to serve the needs of researchers today. Hall retired in 2006, at which time Mitchell Pate, the current director, was hired.

Today, the Poultry Science Research and Education Center encompasses floor pen, cage, battery hatchery, feedmill, processing, training and support facilities, all of which are designed to reflect the needs of today's modern poultry industry. "The success of this center over the years truly reflects the outstanding contributions and leadership of the men who have directed and managed its activities," says Conner.



HELPING HORSES HEAL—Jordan Towns, Veterinary Student Scholar, and Allison Stewart, associate professor in equine internal medicine, have been studying the effects of severe illness on the production of cortisol in horses. Lowered levels of cortisol have been linked with lower survival rates in human intensive care patients, but little is known about cortisol production in equine patients. The study was funded by the American College of Veterinary Emergency and Critical Care Society; Towns received funding from the Morris Animal Foundation.

College of Veterinary Medicine

Student Scholars Focus on Critically Ill Horses

Bradley Johnson, Jordan Towns and Heather Weaver have been named 2009-2010 Veterinary Student Scholars and awarded funding by the Morris Animal Foundation to participate in a study offering help to critically ill horses.

The focus of the study, directed by Allison Stewart, associate professor in equine internal medicine at Auburn's College of Veterinary Medicine, was to determine if critically ill horses experience a deficiency of cortisol or other stress hormones during hospitalization.

Information from human intensive care patients indicates the body's supply of natural cortisol and ACTH is inappropriately low during times of severe illness, that inadequate production of cortisol by the adrenal gland results in lower survival rates and that identification and treatment of adrenal gland dysfunction can improve survival rates by as much as 30 percent.

But little is known about the effects of severe illness on the production of cortisol in horses.

Johnson, Towns and Weaver worked with Stewart on the study of cortisol production in critically ill horses. They explained the study to clients, collected blood samples and analyzed hormone concentrations in their equine patients. Preliminary results indicate that a surprisingly large proportion of critically ill horses in the study had adrenal dysfunction.

"If we could improve the survival rate of our equine patients by as much as 10 to 30 percent by a simple test and cost effective treatment, that would certainly be an achievement," says Stewart.

The Veterinary Student Scholars program gives graduate students hands-on involvement in clinical or basic animal health and/or welfare research early in their career so they will consider entering this field after graduation.



HONORED FOR LIFETIME ACHIEVEMENT—In recognition of their outstanding contributions to the State of Alabama and to Auburn University, the College of Human Sciences honored Gov. Bob Riley and First Lady Patsy Riley with its 2010 Lifetime Achievement Award. During Riley's eight-year tenure as Alabama's chief executive, Alabama has made major advances in the areas of economic development, industrial recruitment and educational achievement. As First Lady, Mrs. Riley has promoted numerous initiatives and highlighted critical issues that affect the quality of life of Alabama's citizens.

entertainment and children's education. During the 2009-10 awards season, PBS programs were honored with 30 Emmys, six George Foster Peabody awards, three IDA Documentary awards, three Writers Guild of America awards, one Academy Award nomination (for best documentary feature), 15 Parents' Choice awards for television and five Parents' Choice awards for websites.

Accepting the Quality of Life Award on behalf of PBS was Paula Kerger, president and CEO.

The International Quality of Life Awards are sponsored by the College of Human Sciences to honor individuals who have achieved at the highest levels professionally and have demonstrated a strong commitment to empowerment through public policy and educational initiatives to enhance quality of life.

College of Human Sciences

PBS Wins Quality of Life Honors

The American nonprofit broadcasting system PBS received top honors when Auburn University and the College of Human Sciences hosted the 17th Annual International Quality of Life Awards ceremony on Dec. 6 at the United Nations in New York City. Governor Bob Riley and First Lady Patsy Riley were also recognized at the ceremony.

PBS maintains the highest industry standards for programming excellence, innovation and fairness for broadcast content and was named as the most trusted and unbiased nationally known U.S. institution for the seventh consecutive year by the GfK Roper Public Affairs and Media poll.

PBS programs range from news and public affairs to the arts, culture, entertainment and children's education.

School of Forestry and Wildlife Sciences

Shepard Named Dean



Jim Shepard

Jim Shepard, professor and associate director of the Forest and Wildlife Research Center at Mississippi State University, has been named dean of Auburn University's School of Forestry and Wildlife Sciences, effective Jan. 3.

"Dr. Shepard has an outstanding record of accomplishments in forest sustainability, environmental management and academia," says Auburn Provost Mary Ellen Mazey. "The faculty, staff, students and administration look forward to working with him as we continue to build the academic, research and outreach programs of

the School of Forestry and Wildlife Sciences."

Shepard's roles at Mississippi State included working as the associate director of the Mississippi Water Resources Research Institute and being responsible for supporting research within the College of Forest Resources. Prior to being named to his current positions in 2009, he was head of Mississippi State's Department of Forestry from 2005 to 2008.

Shepard also served as a courtesy associate professor in the University of Florida's School of Forest Resources and Conservation and as a research scientist at the State University of New York College of Environmental Science and Forestry. He earned his doctoral degree from Mississippi State in 1985 in forest resources with a focus on forest soils.

"I am impressed with Alabama's huge diversity of forest ecosystems, from the mountains of the north to the coastal wetlands," Shepard says. "Natural resources substantially enhance people's lives through forest-based jobs and recreation. I am looking forward to leading a school whose faculty, staff and students are ensuring a bright future for the forest and wildlife resources of Alabama and beyond."

Shepard succeeds Richard Brinker, who is retiring after 13 years as dean and 23 years overall at Auburn.



UP CLOSE AND PERSONAL—During the annual bat walk, children got up close and personal with bats, viewed a slideshow with important information on bats and how vital they are to our environment and used night vision and bat detectors to find bats in the arboretum.

College of Sciences and Mathematics

Tri-Beta Hosts 22nd Annual Bat Walk

The Auburn University College of Sciences and Mathematics chapter of Tri-Beta, the national biological sciences honor society, hosted the 22nd annual bat walk at the Donald E. Davis Arboretum on Oct. 26. Participants of all ages gathered at the arboretum to learn more about bats, including common myths and misperceptions and their benefit to humans and the environment.

"I think children have a prior idea that bats are dangerous and somewhat frightening, but I think being able to show younger children what bats really are about gives them the chance to see bats in a more positive light," says Tri-Beta treasurer and microbiology student Michelle Hammond.

"The Bat Walk we put on gives the community a chance to see how important bats are to our environment as well as their contribution and symbiotic relationships in maintaining the habits of various other species," says Hammond.

Bats are responsible for pollinating plants, spreading seeds, eating mosquitoes and even producing fertilizer—aka bat guano.

After viewing a slide-show of the 16 species of bats found in Alabama, participants had an opportunity to search for bats in the arboretum using bat detectors and night-vision equipment.

For more information on bats, including instructions on how to build a bat house for your landscape, visit the Bat Conservation International website at www.batcon.org.



COMING HOME—Valentin Abe, left, a Time magazine “hero” for 2010 and an alumnus of the Department of Fisheries and Allied Aquacultures, returned “home” to Auburn from his adopted country of Haiti for homecoming weekend. Abe delivered the Fall 2010 York Distinguished Lecturer presentation to a crowd of some 200 listeners on Nov. 4 and stayed for the weekend to reunite with friends and former colleagues, such as David Rouse, right, head of the fisheries and allied aquacultures department.

New Scholarship Honors Durbin

Agronomy and soils students will soon have access to a new scholarship being established in honor of Bobby Durbin, who spent nearly his entire life living or working on Auburn University’s agronomic research units in Tallassee and Shorter.

Durbin, who passed away in March, grew up on the Plant Breeding Unit in Tallassee where his father was a supervisor, and he worked there for several summers before graduating from Tallassee High School in 1973. Immediately after high school, Durbin joined the Alabama National Guard, in which he served for six years, and returned to the PBU as a full-time agricultural technician in 1975.

In 1982, Wink Allison, an Auburn agronomy Ph.D. graduate, persuaded Durbin to accept a position as a forage plot technician at the Central Georgia Branch Station in Eatonton, Ga., but Durbin and his family—his wife, Shelby, who is a Tallassee native, and their two daughters, Stephanie and Amanda—soon realized that they wanted to be closer to their families.

They returned to Tallassee later that year and Durbin began work as an agricultural technician at the E.V. Smith Research Center Field Crops Unit in Shorter, just down the road from the PBU. He was appointed supervisor at FCU in 1990 and became superintendent in 1997, a position he held until he succumbed to cancer earlier this year.

Those who knew Durbin describe him as a “walking encyclopedia” when it came to growing agronomic crops, and his advice was sought on and off the station. His meticulous record keeping and complete dedication to his job helped ensure the quality of research results coming from studies at the FCU and also helped make the careers of many Auburn and U.S. Department of Agriculture scientists.

Wayne Reeves, former USD A-National Soil Dynamics Laboratory scientist at Auburn who first met Durbin in 1982 when Reeves entered Auburn’s Ph.D. program in agronomy and soils, credits Durbin with teaching him how to “properly” conduct field research.

“Bobby never stopped learning, and teaching. Graduate school classrooms do not teach you how to lay out plots so that 200 HP tractors can maneuver between plots, nor how to ‘practically’ manage spatial variation, deer predation and other uncontrollable sources of experimental error,” says Reeves, adding that Durbin did teach him those things.

“Bobby did not enjoy supervising people but he was a natural leader, leading by example,” says Reeves. “He always was the first person to open the station gate and he did not leave until the work was done, often till 10 or 11 at night.”

To honor Durbin’s contributions and legacy, faculty and staff in the department of Agronomy and Soils, USDA-ARS National Soils Dynamics Laboratory, and friends and family members have established the Bobby Durbin Endowed Scholarship in Agronomy and Soils, as a part of the Spirit of Auburn Scholarship Campaign. It will provide scholarship awards for students majoring in agronomy and soils in the College of Agriculture. This endowment is created through gifts totaling \$25,000 over a five-year period.

The Spirit of Auburn Scholarship Program was established to provide four-year renewable scholarships for incoming freshmen based on academic achievement as demonstrated by high school GPA and standardized test scores.

To be eligible for this scholarship, students must be identified as Spirit of Auburn recipients and be enrolled in Auburn’s Department of Agronomy and Soils.

To learn more about the Durbin scholarship or other Spirit of Auburn scholarship programs, contact Mark Wilton at wiltom@auburn.edu or 334-844-1198.



WOOL BLANKET?—As cold as it was for the 31st annual Ag Roundup and Taste of Alabama Agriculture celebration, held Nov. 6 at Ag Heritage Park, a wool blanket would have been nice, but some had to settle for their blankets on the hoof. Despite the chilly temperatures an estimated 2,000 people attended the event, co-sponsored by the Auburn Agricultural Alumni Association and the College of Agriculture. Most of those visitors kept warm by stoking up on the amazing food choices available at the event. Many found free hot chocolate and a sheltered spot inside the Ham Wilson Livestock Arena, too, where they bid on auction items and raised \$8,410.50 in funds for the Ag Alumni Association’s scholarships.



BLACKWELL FAMILY ENDOWS FUND FOR RED BARN—John Blackwell, a member of the Auburn University Board of Trustees and a long-time supporter of Auburn agriculture, was on hand for homecoming weekend to unveil a plaque that will hang at the Old Red Barn at Ag Heritage Park. Blackwell and his family recently made a significant endowment, titled the Blackwell Fund for Excellence at Ag Heritage Park, to be used for educational programs at and upkeep of the Old Red Barn. Pictured at the unveiling are, at right, John Blackwell, and his sons, from left, Austin, Slade and Taylor.

Ag Classic 2011 Dates Announced

Golfers, sharpshooters and anglers alike should mark their calendars for April 27-28, 2011—the dates for the 14th annual Ag Classic tournament.

Ag Classic has become one of the greatest traditions within the College of Agriculture, providing alumni and friends a reason to visit Auburn and share in a little friendly competition and mostly enjoy lots of fun and fellowship.

In addition to fishing, clay shooting and golf tournament events, Ag Classic includes a social hour, dinner and auction.

Deadlines for Ag Classic registration will be announced early next year. For more information about Ag Classic, contact Katie Hardy at 334-844-1475 or hardyk@auburn.edu or go to www.ag.auburn.edu/adm/development/agclassic/.

Social Media Changing Extension Outreach Methods



Amy Winstead

Amy Winstead is one of a growing number of Alabama Cooperative Extension System professionals who are adopting social media technologies to communicate with their clientele. In her work as a regional Extension agent specializing in precision agriculture, she's increasingly turning to Facebook, Twitter and blogs to interact with Alabama farmers.

As she sees it, the social-media age represents a giant leap forward for the Alabama Cooperative Extension System and its outreach efforts,

"Our clientele is evolving, and we're going to have to evolve with it," Winstead says. "We have to use the new media."

Winstead, along with Auburn biosystems engineering associate professor John Fulton and then-precision farming agent Shannon Norwood, launched the Alabama Precision Ag Team website in 2009. A blog as well as Facebook and Twitter sites soon followed.

Winstead collaborates with Fulton, Daniel Mullinex, a research engineer who works with Fulton, and other members of the Alabama Extension Precision Agriculture team to produce the content for the blogs, Facebook statuses and tweets.

"What we wanted was a social media presence that was highly intuitive and accessible," Winstead says. "Helping farmers put information into context is one of the things we've always done in Extension, and social media are helping us do this far more cost-efficiently and effectively."

Social media technology is a dramatic change for Extension, where, for decades, agents and specialists have disseminated information via face-to-face encounters and traditional media, such as newspapers and publications and broadcast media. Today, the traditional means of communicating are quickly being overtaken by virtual sources of knowledge. Winstead doesn't see social media replacing personal contacts. Instead, she says social media will enhance these traditional Extension roles.

Entire School Enrolled in 4-H Junior Master Gardener Program



A BUG'S LIFE—Castlen Elementary School second-grade teacher Karrie Tillman, left, and Anna Keith, who teaches first grade, look at the bugs they captured during a summer training workshop in which they learned about Extension's Junior Master Gardener program as well as 4-H and horticulture. Castlen, which is in Grand Bay, is the first school in the state in which the entire school is enrolled in the Junior Master Gardener educational program, a nationally developed curriculum aimed at teaching students a love of gardening.

For the 430 students who attend Castlen Elementary School in Grand Bay, Thursday is the best day of the week, because if it's Thursday, it must be "garden day." That means time outside and hands-on learning about plants and how they grow.

The Mobile County school is the first in the state in which the entire school is enrolled in the Junior Master Gardener educational program. Created by Texas A&M, the JMG curriculum is administered through 4-H and youth development programs in each state.

In Alabama, JMG is funded by Bonnie Plants Inc. and coordinated by Luci Guthrie Davis, who provides educational training for school teachers and other adults who want to help youth learn the joy of gardening.

The Castlen teachers and administrators are guided by Davis along with Jane Hartselle, 4-H regional Extension agent, and James Miles, horticulture regional Extension agent. Both Hartselle and Miles are based in Mobile County's Alabama Cooperative Extension office.

"Castlen Elementary School is the example that other schools in Alabama can follow to help children learn in ways that are exciting, creative and fun," Davis said. "We hope Castlen is the first of many entire-school JMG programs."

Before the 2009 academic year began, Davis, Hartselle and Miles prepared Castlen's teachers for the first year with two days of training on JMG, 4-H and horticulture to get the teachers prepped for the year. The trio returned to Castlen this past summer to learn about last year's successes and create a plan for this school year.

In the program's first year, teachers and students planted a variety of vegetables and herbs as well as a bog garden where they learned about carnivorous plants. Students planted, weeded, observed insects and collected data in the outdoor classroom. Inside, teachers used those experiences and incorporated them into everyday classroom learning.

This year, teachers decided to grow by grades: Kindergartners and third-graders are growing plants in a new greenhouse built next to the school, first-graders are tending a butterfly garden; second-graders are expanding the bog, fourth-graders are planting cabbage and collards and fifth-graders are growing onions and herbs.

Teachers and students alike enjoy the program, which also teaches community responsibility. Last school year, students in the fourth grade started a recycling program at the school and donated proceeds to help pay medical bills of the family of a Castlen student who was battling a disease.

For more information about Castlen's Junior Master Gardener program, contact the Mobile County Extension office at 251-574-8445 or Alabama JMG coordinator Luci Guthrie Davis at 334-703-7509.



NATIONAL VOLUNTEER AWARD—Patricia Bryant, a west Alabama woman who has been an ardent 4-H volunteer for almost two decades, has been named the 2010 National Salute to Excellence Lifetime 4-H Volunteer, the highest honor 4-H bestows on volunteers. She received the award in an October ceremony at the National 4-H Center in Chevy Chase, Md. Since becoming a 4-H volunteer in 1991, Bryant has mentored hundreds of west Alabama youth, working to instill in them a sense of self-worth and responsibility and the core life skills of leadership and citizenship. The Epes resident's passion is born of her personal experiences with 4-H in her childhood and teenage years.



CONSERVATION HONORS—Tuscaloosa County 4-H member Hunter Ford holds the Alabama Wildlife Federation's 2010 Alabama Governor's Youth Conservationist of the Year Award that Alabama Gov. Bob Riley presented to him during the recent 2010 Governor's Conservation Achievement Awards banquet. The Tuscaloosa County High School junior is the 14th 4-H member from his county to receive the prestigious Alabama Wildlife Federation honor since 1988. Ford grew up with a keen interest in wildlife, the outdoors and conservation and has been involved in a number of natural resource activities. He is president of the Tuscaloosa County 4-H Natural Resource Club and a junior leader at the annual Tuscaloosa County 4-H Natural Resource Short Course. For eight years now, Ford has been a member of Tuscaloosa County 4-H's forestry- and wildlife-judging teams and has won awards on the county, state and national levels. He also was part of the 2009 Alabama 4-H Forestry Judging Team that won the national championship.



COMING YOUR WAY—Vehicles across the state soon will be sporting this new Alabama Master Gardener specialty license plate—but not until 1,000 Alabamians have promised to buy it. As with all specialty tags, the state's Motor Vehicle Division will not issue the new tag until that requirement is met. Commitment-to-purchase forms are available at county MVD offices, and Kerry Smith, state coordinator of Alabama's Master Gardener Program, is urging all supporters of the program to sign up for the tag now, even if it is not their annual tag renewal month. All commitment forms must be submitted along with a \$50 prepayment for the state's specialty-tag fee; for those who want personalized Master Gardener tags, an additional \$50 is required, for a total prepayment of \$100. Once officials receive the 1,000th pledge-to-purchase form, they will notify prepurchasers that the tags are available for pickup. All proceeds from tag sales will be split 50-50 between the Alabama Master Gardener Association Horticulture Scholarship fund and the Master Gardener Volunteer Program. For information, contact Smith at smithkp@auburn.edu.

Calendar of Events

December • 2010

s	m	t	w	t	f	s
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

January • 2011

s	m	t	w	t	f	s
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

February • 2011

s	m	t	w	t	f	s
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

Jan. 10

2011 Tostitos BCS National Championship
Auburn Tigers vs Oregon Ducks
6:30 p.m. MST
University of Phoenix Stadium - Glendale, Ariz.

Jan. 17

Martin Luther King, Jr. Holiday

Jan. 26-28

Industry Insight: High School Edition
International Poultry Expo - Atlanta, Ga.

The Department of Poultry Science, in conjunction with the U.S. Poultry & Egg Association, is giving high-school students and their teachers the chance to experience the International Poultry Expo firsthand. Companies from around the world and representing all facets of the poultry industry will be on hand at the Expo, which offers an ideal opportunity to educate students about the unlimited career possibilities in the poultry industry.

Contact: www.ag.auburn.edu/poull/prospectivestudents/Teachers/IndustryInsight.php

Feb. 16

Spring Judging Clinics
9 a.m.

Ag Heritage Park - Auburn

These events, co-hosted by the poultry science, animal sciences and horticulture departments along with the School of Forestry and Wildlife Sciences, give students the opportunity to gain experience and practice competing in career development events before the district competitions. The clinics are open to all high-school students interested in learning about poultry, nursery/landscape, floriculture, livestock, dairy, horse judging and forestry. Each student will be able to participate in two of these seven areas.

Contact: www.ag.auburn.edu/poull/prospectivestudents/Teachers/SpringJudgingClinics.php

Feb. 23

AU Agricultural Alumni Association Annual Meeting and Hall of Honor Banquet

6:15 p.m.

The Hotel and Dixon Conference Center - Auburn

This event includes a board meeting, a membership meeting and the Hall of Honor awards banquet.

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

Mar. 14-18

AU's Spring Break

Mar. 28-April 1

Ag Week
Auburn

This week of activities is focused on all things Ag Hill, including a Comer Hall picnic, special speakers and a career day for high-school students.

Contact: Deborah Solie at das0002@auburn.edu or 334-844-8900

Mar. 31

Spring 2011 York Distinguished Lecturer Series

7 p.m.

Student Center Ballroom - Auburn

This event is the spring lecture of the York Distinguished Lecturer Series and will feature Temple Grandin, an animal scientist who has written best-selling books about the humane treatment of livestock, the connections between humans and animals and her own struggles with autism.

Contact: www.ag.auburn.edu/adm/dean-dir/yorklecture/index.php or Deborah Solie at 334-844-8900 or das0002@auburn.edu

For more information on these and many other upcoming College of Ag and AAES events go to www.ag.auburn.edu and click on the "Calendar" button.

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AG illustrated

Recipe File

All Curd, No Whey

Environmental Soils Lab Chief Shares Can't-Miss Recipes

On a recent research mission to the Baltic states (story, page 6), the College of Ag's Brenda Wood became a huge fan of homemade curd, which tastes like ricotta and which locals most enjoy crumbled atop shortbread. When she returned home, Wood found the delicious curd recipe below on Heifer International's website and since has gone into "curd-making overdrive." She will, however, find time this holiday season to roast a few pounds of Spicy Pecans, a favorite at the Woods' home this time of year.

Homemade Curd

- 1/2 gallon whole milk
- 1/8 cup white vinegar or lemon juice
- Salt, to taste
- Garlic powder, dill, oregano or seasoning of choice, to taste

Pour milk into a medium pot. Heat over low heat, stirring constantly. When milk boils, turn off heat, add vinegar or lemon juice and continue to stir for 5 minutes. The milk will separate into solids and liquids. Pour mixture into a colander until most of the liquid—the whey—has drained out.* Add salt and desired seasoning. Place in container and refrigerate. Serve the curd crumbled over crackers, salads, pizza or other dishes.

*(Reserve the liquid—the whey—to replace water in making rice, bread and soups, or to water blueberries, roses and other acid-loving plants.)



Brenda Wood

Spicy Pecans

- 3 tablespoons butter, melted
- 3 tablespoons Worcestershire sauce
- 1/4 teaspoon garlic powder
- 1/4 teaspoon hot sauce
- 1 pound pecan halves (or other favorite nuts)
- Tony Chachere's Creole Seasoning, to taste
- Garlic salt, to taste

In a small bowl, combine butter, Worcestershire sauce, garlic powder and hot sauce; mix well. Place pecans on a baking sheet with sides; pour mixture over pecans and toss nuts to coat. Bake at 350 degrees for 20 minutes, stirring occasionally. Remove pecans from oven and sprinkle with Tony Chachere's seasoning and garlic salt. Cool completely and store in an airtight container.