

Rocket Man

Ag Engineering Alum Plays Key Role in U.S. Space Program

by JAMIE CREAMER



CONTROLLING THE ROLLING—Left photo, Auburn ag engineering alum Mike Soutullo, chief engineer of Teledyne Brown Engineering's Aerospace Systems division, supervises technical work on the roll control system Teledyne Brown designed and manufactured for the Ares 1-X rocket. Above, NASA's Ares 1-X test rocket lifts off from Kennedy Space Center in October for a two-minute flight test, during which the roll control system performed perfectly. (Left photo courtesy of Johnny Miller/TBE Inc.; above photo courtesy of Sandra Joseph and Kevin O'Connell/NASA)

But Renoll could be tough and was a stickler for details. Take that sweet potato-harvesting machine project, for instance.

"He went over those designs with a fine-toothed comb," Soutullo says. "He made sure we had taken every possible thing into account. I think he counted off on mine because he said I hadn't calculated how much hydraulic fluid I would need, something like that."

At Auburn, Soutullo was a co-op student, so every other quarter, he worked full time, for pay, with the John Blue Company, a Huntsville farm equipment manufacturing operation that specialized in fertilizer applicators. And when he got his degree, the company had a project designer position with his name on it.

Soutullo truly enjoyed his work at John Blue, but when, in 1983, he heard through a friend about a Teledyne Brown Engineering opening for a design engineer to work on various NASA projects, he couldn't resist.

His work at TBE—which, incidentally, has earned him recognition as Auburn's 2010 Outstanding Biosystems (formerly Agricultural) Engineering Alumnus—has largely involved payload integration, which basically means fitting together all the scientific equipment to be in numerous experiments that will be conducted during a mission so that every component performs

(continued on page 2)

THE FIRST MAJOR engineering design challenge Mike Soutullo ever faced came in a fluid mechanics and hydraulics class that the agricultural engineering major was taking at Auburn University. The assignment: to design a mechanical sweet potato harvester.

His most recent major engineering design challenge—or one of them, anyway—in his job with Teledyne Brown Engineering Inc.: to develop a system that would control the roll of a NASA rocket in the first critical moments after liftoff.

Soutullo met both challenges quite successfully. He got an A on that first set of plans, and on Oct. 28, 2009, at Kennedy Space Center, he watched as the Roll Control System Modules he developed performed flawlessly in a two-minute trial flight of NASA's Ares 1-X test rocket.

"It was an aggressive schedule, demanded perfection and required coordination of numerous NASA and contractor teams," Soutullo says. "But we finished the assignment on time and under budget."

That's the norm for Soutullo, who joined TBE 27 years ago as a project engineer and rose through the ranks to his current role as chief engineer of its Aerospace Systems division.

That he would one day play a vital role in the nation's space program was the farthest thing from Soutullo's mind in December 1980 when he graduated from Auburn with his bachelor's degree in agricultural engineering.

But to back up a bit, that he would one day be an engineer of any sort was the farthest thing from his mind when the Mobile native enrolled

in Auburn in the fall of 1976. He was set on a degree in forestry and a career as a forest ranger.

"I loved to hunt, and I loved being outside, so being a forest ranger sounded like the perfect job," he recalls.

Apparently, that was a pretty common thought among guys his age.

"After I got to Auburn, I realized there were a lot of folks just like me who were in forestry and who wanted to be forest rangers, and I started thinking how all of us would be out there one day competing for the same low-paying jobs," he says. "I knew I had to figure out something else to major in."

That posed a dilemma. At the time, Auburn's forestry department was in the College of Agriculture, and Soutullo loved being a part of it.

"Everybody I had met in agriculture was great and so was the environment, and I really didn't want to transfer out to some other college," he says. "But I didn't see how I had a choice, because I hadn't grown up on a farm or didn't know anything about agriculture."

Fortunately, Soutullo had become friends with Shannon Vinyard. Vinyard was an ag engineering major, and he successfully encouraged Soutullo, who had never seriously considered going into engineering, to give it a shot.

"It was a very good decision," Soutullo says. "I have never once looked back."

Soutullo apparently had the mind of an engineer because he did very well in his classes. But he attributes his performance to his outstanding teachers—most notably, professor Elmo Renoll.

"I had him for classes, and he was my adviser," Soutullo says. "Somehow, we connected. The whole time I was at Auburn, he gave me a lot of support and encouragement."

Contents

FEATURES

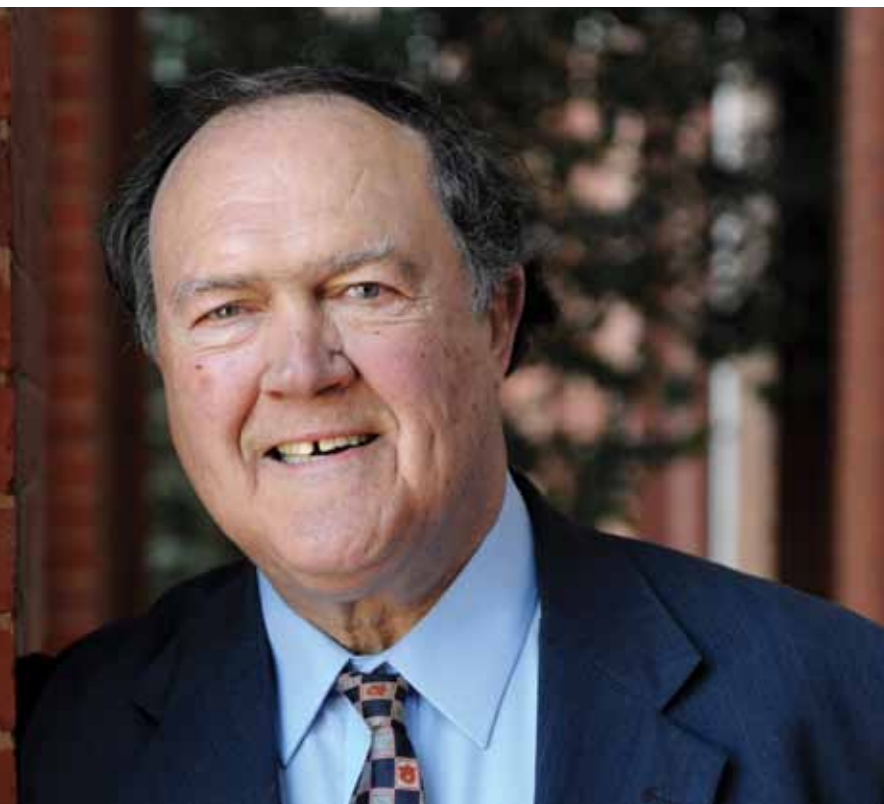
New Dean!.....	02
Comer 100	04
The Right Path.....	05

SECTIONS

View from Ag Hill.....	02
Alumni and Development	03
Inside the College	06
Research News	08
Around the AAES	10
Extension	11
Calendar of Events	12

AUBURN
AGRICULTURE
www.ag.auburn.edu

View from AGHill



I expect this to be my last column for *Ag Illustrated* and I will miss doing it. I have thoroughly enjoyed being a part of this publication just as I have enjoyed serving as dean and director. The past five years have been a very special time in my life. The friendships that have been cultivated have greatly enriched my life and had a similar effect on my wife, Kay, and our family. The job has been mostly about relationships: faculty, students, administrative colleagues, farmers, ranchers, forest landowners, agribusiness leaders, alumni and many international friends have made the job very meaningful.

I want to welcome the new dean and director, William Batchelor, to Ag Hill. He comes to us from Mississippi State University where he has been head of the Department of Agricultural and Biological Engineering and director of Mississippi State's Sustainable Energy Research Center, which he was instrumental in establishing. He has an exemplary record as a scientist, educator and administrator and we are lucky to have such a skillful and forward-thinking leader taking the reins of our college and the AAES.

I encourage our students, faculty, staff, alumni and friends to join me in welcoming the entire Batchelor family into our Auburn family.

Retirement plans for me include time with my grandson, Will, other family members, a little golf, a little fishing, some genealogy research and continuing to be involved in Ag Hill events such as Ag Classic, Ag Roundup, the Ag Alumni Association and a small role in activities that might benefit AAES and ACES. Kay and I plan to remain in Auburn and enjoy the community that we have come to love. I look forward to occasionally seeing every one of you in the future.

Richard Guthrie
DEAN, COLLEGE OF AGRICULTURE
DIRECTOR, ALABAMA AGRICULTURAL EXPERIMENT STATION

Auburn Names New College of Agriculture Dean

William Batchelor, head of the Department of Agricultural and Biological Engineering at Mississippi State University, has been named dean of Auburn University's College of Agriculture. He also will assume the directorship of the Alabama Agricultural Experiment Station, pending approval by the Auburn University Board of Trustees at the June 18 meeting.

"The role and practice of agriculture is much different today than just a few years ago, and it continues to rapidly evolve," Auburn President Jay Gogue says. "Dr. Batchelor is a highly accomplished researcher and administrator whose leadership will ensure that Auburn stays ahead of those changes and strengthens our service to the state."

Batchelor led the development of the Sustainable Energy Research Center at Mississippi State University in 2005 and currently is its director. He led faculty in creating a proposal that was awarded \$26 million in grants from the U.S. Department of Energy for operational costs. The center conducts research on sources of renewable fuels, including bio-crude, bio-oil and syngas, that do not compete with existing crops, such as corn and soybeans, needed for the global food supply. Batchelor also is director of the Energy Institute at Mississippi State, which has approximately 200 researchers in several centers and departments.

In 2009 he was named a fellow of the American Society of Agricultural and Biological Engineers for his contributions to information and electrical technologies and biological engineer-

ing. He also serves as president of the Institute of Biological Engineers.

"Dr. Batchelor's outstanding academic and administrative records will provide the College of Agriculture and the Alabama Agricultural Experiment Station with a nationally and internationally recognized scholar and leader," Auburn Provost Mary Ellen Mazey says. "We are pleased to welcome him to Auburn."

Batchelor will begin his appointment on July 15. As dean of the College of Agriculture he will report to Provost Mazey, while, as director of the Alabama Agricultural Experiment Station, he will report to President Gogue. Batchelor succeeds Richard Guthrie, who is retiring after more than 25 years of service to Auburn.

"Auburn has an outstanding reputation for teaching, research and outreach in agriculture," Batchelor says, "and the Alabama Agricultural Experiment Station is nationally recognized for its valuable service to Alabama, the nation and the world. I look forward to working with the faculty and staff as we build upon the history of accomplishments and continue to seek ways to serve the people of Alabama. Dawn and I are looking forward to joining the Auburn family and being part of the university's success in the future."

Batchelor earned his bachelor's and master's degrees in agricultural engineering at the University of Georgia in 1986 and 1987, respectively, and his doctorate in agricultural engineering at the University of Florida in 1993. He worked at Iowa State University from 1994 until 2005, ad-



William Batchelor

vancing to the rank of professor. He joined the Mississippi State faculty in 2005. From 2005 to 2007 he served also as a Distinguished International Professor for the University of Hohenheim in Stuttgart, Germany.

er sweeping changes to the space program that have created an atmosphere of uncertainty at all levels.

"Transitioning to a new course will take time, but we're postured to take on a new role as defined administration and Congress," Soutullo says. "My hope is that Americans realize NASA's accomplishments have been good for America and the world." ☞

Ag Classic 2010 Yields Funding and Fellowship



WINNING OR NOT, IT'S FUN!—Mike Wood, left, and Michael Deshazo may not have taken home the top honors from the Ag Classic golf tournament, but it looks like they had lots of fun. They were among the 200 or so people who came out for the 13th annual Ag Classic held this spring, an event that raised more than \$27,000 for College of Ag awards and projects.

Ag Classic 2010 is a thing of the past, but its impact will be felt for some time to come.

This year's event, which was the 13th annual Ag Classic, brought in approximately \$27,500 in outright gifts and pledges and tournament proceeds for the Richard L. Guthrie Award for Achievement in International Agriculture.

More than 200 people participated in the event which included two days of golf, fishing and clay shooting tournaments as well as lots of chances to meet and greet. This year's sponsors included Adams Beverages, Alabama Peanut Producers, Alabama Pork Producers, Alabama Poultry & Egg Association, Alabama Ag Credit, Alabama Farm Credit, Beck's Turf Farm, Coca Cola, Conecuh Sausage, First South Farm Credit, Keystone Bank and TK Farms.

First place winners for the clay shooting tournament were Jim Cravey and Dave Patrick. Lance Kelly landed the biggest bass (7 pounds, 6 ounces) in the fishing tournament and Jerry Adams hooked the largest stringer of bass (five fish weighing a total of 8 pounds, 4 ounces).

The first place team (gross score) for the first day of golf included Alec Sheffer, Bill Turner, Ray Hollis and Mitch Raby. This team also won first place for their net score on the second day of golf. Members of the first place gross score team for the second day of golf were Alvin Bradford, Edell Fleming, John Crowson and Ray Worley.

Dates for next year's Ag Classic will be announced soon, but in the meantime check www.ag.auburn.edu/adm/development/agclassic/ for updates.

Alumni Updates

Valentin Abe, an alumnus of the Department of Fisheries and Allied Aquacultures, was cited by former U.S. President Bill Clinton in the April 29 *Time* magazine article for his contributions to Haiti's fisheries program. The article ran in *Time's* annual 100 people who most affect our world edition. View the article at www.ag.auburn.edu/fish/.

Will Pearce of Selma was named Alabama's Catfish Farmer of the year at the 2010 Catfish Farmers of America Annual Convention held earlier this year in Charleston, S.C. Pearce, together with his brother, David Jr., farm 1,400 water acres in Dallas County. He graduated from Auburn in 1996 with a degree in agricultural economics and immediately returned to the family farm. See an article on Pearce from the Selma Times-Journal at www.selmatimesjournal.com/news/2010/apr/24/fish-farmer/.

In Memoriam

Ira Daves (I.D.) McClurkin Jr., 84, of McDade passed away April 1. McClurkin, who graduated from the College of Agriculture in 1951 with an agricultural science degree, was a charter member of the Auburn University Block and Bridle Club and a life member of the Auburn University Alumni Association. Memorial donations may be made to the First Presbyterian Church at 9299 Vaughn Road, Pike Road, AL 36064 or to your favorite charity.

Robert A. Voitle, 72, professor of poultry science and a former dean in the College of Agriculture, passed away on May 21 from complications due to leukemia and lung cancer. Donations may be made in his memory to the Leukemia and Lymphoma Society (100 Chase Park S., Suite 220, Birmingham, AL 35244; 1-888-560-9700; www.leukemia-lymphoma.org) or the American Cancer Society (P.O. Box 22718, Oklahoma City, OK 73123; 1-800-227-2345; www.cancer.org).

Glenn Howze, professor emeritus of the Department of Agricultural Economics and Rural Sociology, passed away May 24. Howze spent 18 years at Auburn before retiring in 2003, and served as chair of the University Senate during the 1998-99 academic year. Memorials in honor of Howze may be made to a fund set up in Howze's name through the American Association of University Professors (www.aaup.org/aaup) or the Red Cross Haitian Relief Disaster Fund.

Hall of Honor Nominations Sought

It's time to make nominations for the next round of inductees in the Auburn University Ag Alumni Association's Hall of Honor, and this year the process will be a bit different.

Forms to submit new nominees or send additional letters of support for previous nominees will not be mailed to Ag Alumni Association members but can be obtained online or from Elaine Rollo at 334-844-3204 or at rolome@auburn.edu. The online forms, which are available at www.ag.auburn.edu/adm/alumni/hall_of_honor.php, can be printed from a downloadable PDF or submitted electronically from the site.

The names of all nominees will be posted on the website along with a list of all recipients. The Hall of Honor banquet will be held Feb. 22, 2011, at The Hotel at Auburn University and Dixon Conference Center.

Development Takes Fundraising to Corporate/Foundation Level

by JAMIE CREAMER



Don Crow

The College of Agriculture's newest development officer is no stranger to Ag Hill. In fact, as a kid growing up in Jacksonville (Ala.), Don Crow spent many a fall football Saturday in Auburn, tailgating pre- and post-game with his family on the front lawn of Comer Hall.

"I've got a lot of good memories here," says Crow, who in February moved from Auburn University's central development office to focus on corporate relations for the college. "It's almost been like coming home."

"The atmosphere in the College of Ag is great, and the people are incredible," he says.

Crow joins ag's veteran fundraisers, Mark Wilton and Wes Cumbie, who have spent the lion's share of their time working with individual donors and will continue in those roles. The addition of Crow to the staff will allow the college to tap into a new source of support.

"We've never had the time or personnel to devote to cultivating strong relationships with private-sector industries," Wilton says. "The addition of Don to our office is a tremendous plus for the College of Ag."

Though always a loyal Auburn fan, Crow earned his degree at Jacksonville State University, graduating in 1993 with a bachelor's in English and a commission as a second lieutenant in the U.S. Army through JSU's ROTC program. He spent the next seven years on active-duty, completing three tours of duty in Bosnia that included six months on the Serbian border as part of the peace-keeping effort Task Force Able Sentry and then serving as a company commander at Fort Jackson, S.C., before being discharged from the Army in 2000 as a captain.

Fresh from the military, Crow landed a management job with America Online that took him first to Jacksonville, Fla., and then to Dulles, Va. In 2006, the AOL "virtual executive" decided to move to—and work from—Auburn, "because I've just always loved the place," he says.

When the opportunity to work with Auburn's central development office arose in November 2008, Crow jumped on it. And when development officials in early 2010 decided to shift manpower from the central level to the individual colleges and schools, he jumped on the opportunity to transfer to the College of Ag.

"Since I'd been in development, I'd worked on a few things with Mark and Wes and (development coordinator) Katie (Hardy) and knew they were great to work with, so when they (central development) said 'College of Agriculture,' I said, 'Absolutely I'll go,'" Crow says.

He hit the ground running and is on a mission to develop strong corporate support for academic, research and philanthropic programs in the college, which, he says, "sells itself."

Crow and his wife, Katie, live in Auburn and are the proud parents of Ellerie Grace, born in March. Crow also has a son, 7-year-old Trevor.

(ROCKET MAN, from page 1)

perfectly in space. Soutullo has integrated payloads for NASA's Spacelab, Space Shuttle, Shuttle Mir and International Space Station programs.

Other projects he has managed run the gamut from designing fixtures to perfectly aligning mega-powerful telescopes on shuttles to integrating cargo for the ISS while heading TBE's

Houston operations from 1997 to 2008 to designing and developing NASA's Lunar Lander Test Bed, a vehicle that was to facilitate the landing of a spacecraft on the moon.

"Was to," of course, because in April President Obama pulled the plug on NASA's long-time vision of returning to the moon and announced oth-



BENEVOLENT SMILES—The ram's head pictured above, described by a local architect as bestowing "kindness and benevolent blessings" on passers-by, is one of the many critters that have a storied history in Comer Hall. The iconic image of cows on the lawn of Comer, pictured at left, was taken in 1924 and is yet another example of the animals that have been part of Comer's 100 years.

More Comer Hall Trivia

Comer 100 (1910-2010)

Comer Hall Critters and Characters by LEIGH HINTON

ANIMALS ARE FREQUENTLY FEATURED IN STORIES ABOUT COMER HALL, the cornerstone of agriculture at Auburn University. Here are a few of the tall tales about critters, characters in the ag community and their interactions in and around Comer Hall over the years.

Ladies on the Lawn

The photograph of cows grazing on the front lawn is a familiar shot of Comer Hall, but less familiar is that the cows featured in the 1924 photograph are Jerseys, a small, fawn-colored breed valued for its high-protein, high-fat milk. It was W. H. Eaton, the first instructor in dairying during the 1920s and a long-time leader in Auburn's Jersey Cattle Club, who described Jersey cows as "ladies" and believed they should be treated as such.

Stories abound illustrating Eaton's soft-heartedness as far as Jersey cows were concerned. Students who were from dairy farms with Jersey cattle caught a break in Eaton's classes, and they insisted that a sure way to fail was to mistreat a cow during a lab. After some heifers from the AU dairy were sold and loaded for the ride to their new home, Eaton was heard to tell the new owner, "Wait until I leave before you drive away. I can't bear to see those ladies go."

The One That Got Away

On a warm and muggy summer evening in the late 1950s, Morris White, then—assistant profes-

sor of agricultural economics, was working late in his office on the west end of Comer Hall's third floor. All of the windows and doors were open and fans were humming when an unwelcome visitor appeared at the office door. Slithering down from the east end of Comer Hall, which was occupied during those years by zoology-entomology faculty, was the unwelcome caller—a snake. White phoned Bob Mount, zoology faculty member and renowned herpetologist, who recaptured the snake and secured the halls of Comer.

Other stories about Mount and escapee snakes are also told. Did you hear the one about the python? A woman called in reporting a python in her garage. That's not possible, she was told. Pythons can't live around here in the wild. When the phone call was mentioned to Mount, he just happened to know someone whose python had escaped.

Benevolent Beasts

The heads and spiraling horns of rams are prominently featured on the stone capitals that sit atop a series of columns on Comer Hall's eastern, western and northern exteriors. Smiling benign-

ly, the rams "seem to bestow kindness and benevolent blessings on the observer and campus below," says Nicholas Davis, retired professor of architecture, design and construction.

Other components on the stone capitals—called by Davis the most unusual element on Comer Hall's exterior—are acanthus leaves and stalks of corn and wheat as well as what some believe to be cotton bolls. In 1910—the year that Comer Hall was dedicated—cotton was still king and had not yet been devastated by the boll weevil, a critter that has had a greater influence on southern culture and agriculture than any other in Alabama's history.

Pigeon Proofing Comer

For many years, College of Agriculture administration has struggled to prevent pigeons from roosting on Comer Hall. The battle is currently at a stalemate, with anti-roosting spike strips over the north entrance deterring the birds from landing above the front doors to Comer. Another notable victory for the college occurred during the 1970s when then—associate dean of agriculture Charles Simmons placed a wire trap on the roof extension above Comer's south side to capture the pigeons. While pigeon numbers lessened, no one ever asked what their fate might have been. Simmons Drive, the road in front of Comer Hall, is named for Charles Simmons, not for his victory against the pigeons, but for his work with students during his tenure as associate dean. ☞

Sources of information include the following: The Auburn University Digital Library (<https://digitl.auburn.edu/>); the Centennial Celebration of Comer Hall by the College of Agriculture, April 29, 2010. Presented as part of the Discover Auburn Lecture Series featuring the authors of *Inside Ag Hill*, Joe Yeager (Comer Hall through the Years) and Gene Stevenson (Comer Hall and Family); and *Inside Ag Hill: The People and Events That Shaped Auburn's Agricultural History from 1872 through 1999*. To order a copy of *Inside Ag Hill*, visit www.ag.auburn.edu/onlinestore.

Editors/Writers
Jamie Creamer
Leigh Hinton
Katie Jackson

Designer
Hannah Dixon

Photographers
Nathan Burkett
Jamie Creamer
Hannah Dixon
Jeff Edneridge
Sean Graham
Candice Hacker
Leigh Hinton
Katie Jackson
Katie Williams

Contributing Writers
Harriet Giles
Candice Hacker
Tara Lanier
Jim Langcaster
Maggie Lawrence
Tim Meeks
Katie Wilder

Details

Ag Illustrated is a bimonthly publication of the Auburn University College of Agriculture and the Alabama Agricultural Experiment Station. It is compiled and published through Ag Communications and Marketing, the College and AAES information office. This publication is printed on Lynx® Opaque Ultra paper, which is 10 percent recycled and is Green Seal certified.

Subscriptions to *Ag Illustrated* are free and are sent automatically to Ag Alumni Association members. To become a member, go to www.ag.auburn.edu/adm/alumni/. To subscribe, fill out the form below or visit our website at www.ag.auburn.edu/agillustrated. You may also contact us about subscriptions or other editorial issues at Room 3 Comer Hall, Auburn, AL 36849; 334-844-5887; or agcomm@auburn.edu.

Auburn University is an equal opportunity educational institution/employer.
www.auburn.edu

Subscription Request:
Ag Illustrated
3 Comer Hall
Auburn, AL 36849

Name: _____
Address: _____
City/State/Zip: _____

Making Contact

COLLEGE OF AGRICULTURE:
Dean's Office 334-844-2345 | www.ag.auburn.edu

ACADEMIC DEPARTMENTS:
Agricultural Economics and Rural Sociology 334-844-4800 | www.ag.auburn.edu/agec
Agronomy and Soils 334-844-4100 | www.ag.auburn.edu/agrn
Animal Sciences 334-844-4160 | www.ag.auburn.edu/ansc
Biosystems Engineering 334-844-4180 | www.eng.auburn.edu/programs/bsen
Entomology and Plant Pathology 334-844-5006 | www.ag.auburn.edu/enpl
Fisheries and Allied Aquacultures 334-844-4786 | www.ag.auburn.edu/fish
Horticulture 334-844-4862 | www.ag.auburn.edu/hort
Poultry Science 334-844-4133 | www.ag.auburn.edu/poul

ALABAMA AGRICULTURAL EXPERIMENT STATION:
Director 334-844-2345 | www.aaes.auburn.edu
Assistant Director 334-844-8727
Director of Outlying Units 334-844-5611

AAES-AFFILIATED SCHOOLS AND COLLEGES:
College of Human Sciences 334-844-3790 | www.humsci.auburn.edu
College of Sciences and Mathematics 334-844-5737 | www.auburn.edu/cosam
College of Veterinary Medicine 334-844-4546 | www.vetmed.auburn.edu
School of Forestry and Wildlife Sciences 334-844-1007 | www.sfw.s.auburn.edu

ALABAMA COOPERATIVE EXTENSION SYSTEM:
Director's Office 334-844-4444 | www.aces.edu

Termite Tracking

The Right Path

Canadian Grad Student Goes from Brain Science to World of Bugs

by JAMIE CREAMER

Had Canada native Charles Stephen followed through on his original career aim, he could be working as a clinical psychologist right now, evaluating and counseling mentally and emotionally troubled patients, or perhaps as a scientific researcher, delving into the biology and physiology of the human mind.

Instead, he's out trapping termites in Alabama, on his way to earning a master's degree in entomology from Auburn University.

Stephen was a mere eight courses away from earning a psychology degree from Montreal's McGill University when he realized the field that once so intrigued him had lost its allure. A couple of student-worker jobs in psychology labs at McGill drove home the point.

"I worked first in a qualitative research lab—studying people's attitudes and views and how they understand the world—but I had problems with the research design's inherent subjectivity," Stephen says.

Thinking that maybe he would find fulfillment exploring the actual structure and biology of the brain, he got another job in a neuroscience lab. His sole task: slicing up frozen rat brains and mounting the slices on slides. That definitely wasn't a fit.

"I couldn't see myself being content as a therapist either," Stephen says. "I knew I was on the wrong path, and either I could stay on that path and be miserable, or I could change directions."

He chose the latter, but because he wasn't certain what direction to take, he decided to spend a semester taking random elective courses. One of those was an entomology class, and "it was amazing," he says. He had found where he belonged.

Stephen's education was self-funded, which meant he worked—with a capital W—his way through McGill, gaining valuable experience along the way. He assisted with a frog DNA project at a natural history museum, conducted projects in an insect/arachnid lab, went on mass insect/arachnid collection trips in southern Quebec, spent a summer in Alberta working with a provincially funded biodiversity project and started writing a taxonomic guide to that well-known group of arachnids, daddy long-legs.

After graduating from McGill in 2007 with a bachelor's degree in zoology, the roving young scientist wound up in Volcanoes National Park in Hawaii as an entomology intern with the U.S. Geological Survey before returning to

TRACKING TERMITES—Charles Stephen pauses for the camera before searching for termites on Nature Conservancy/Alabama Forever Wild land in DeKalb County on a recent weekend. A key objective of the entomology master's student's research is to identify every species of termite in the state. The photo was taken by Nathan Burkett, who accompanied Stephen on the termite-collecting trip. Burkett was awarded his Ph.D. in entomology in May.

Canada for a job as an entomology technician at an Alberta museum. All the while, he had his eye on graduate school. He applied at a number of colleges and ultimately chose to migrate 1,200 miles southward, to Auburn.

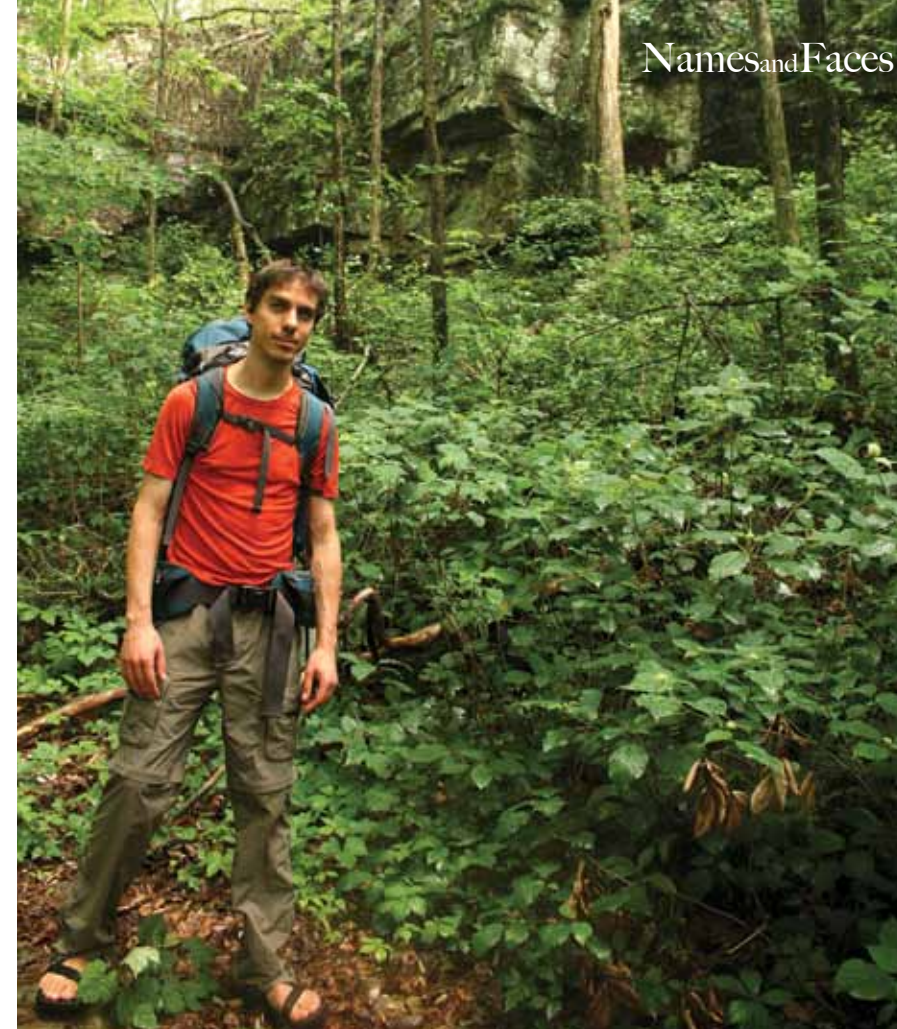
A self-proclaimed nomad, Stephen arrived in Auburn in early August 2009, everything he owned crammed into a single backpack.

"I live simply," he says.

Working under the guidance of Auburn entomology associate professor Xing Ping Hu, Stephen is focusing his thesis research on termites—insects he had only seen in pictures until he came to Alabama. First up, he aims to determine, for the first time ever, exactly how many species of termites, both native and nonnative, call Alabama home. To accomplish that, he is conducting a detailed, statewide termite census, amassing hundreds of samples from field collections and through collaborations with the pest control industry, Extension, Master Gardeners, homeowners and volunteer termite trappers throughout the state.

Using that data, he will calculate and map the locations of each species, along with their predicted ranges and peak swarming and nesting times. And on the environmental front, he is establishing a year-long monitoring project to explore the ecological importance of termites in forest soils.

Already, though, he has reached two firm conclusions: One, he has found his calling in entomology; and two, "Termites are awesome." ☞



College of Ag Offering Distance Education Graduate Degrees in Agronomy and Soils

Professionals working in soil, water, environmental or agriculture fields will soon be able to earn graduate degrees from a distance through Auburn University.

An online distance education graduate degree program developed through Auburn's Department of Agronomy and Soils to help professionals refresh their scientific knowledge and earn master's or doctoral degrees has just been approved, according to Dennis Shannon, professor of agronomy and soils who has led the effort to establish this degree option.

The program began three years ago in response to a survey that indicated strong interest by professionals in agriculture, conservation, natural resource and environmental



FURTHERING EDUCATIONS—Professionals working in soil, water, environmental and agricultural fields are often educators in their own rights, but now they can further their own educations through a new distance education graduate degree program offered through the Department of Agronomy and Soils.

agencies in taking classes and earning advanced degrees. While these professionals want to advance their education, doing so is difficult because they work full time or don't live near an appropriate college.

The courses offered should be especially appealing to professionals

working in construction and environmental management, sustainable agriculture, turfgrass and golf course management and with agricultural and conservation agencies such as the Alabama Cooperative Extension System and the Natural Resources Conservation Service.

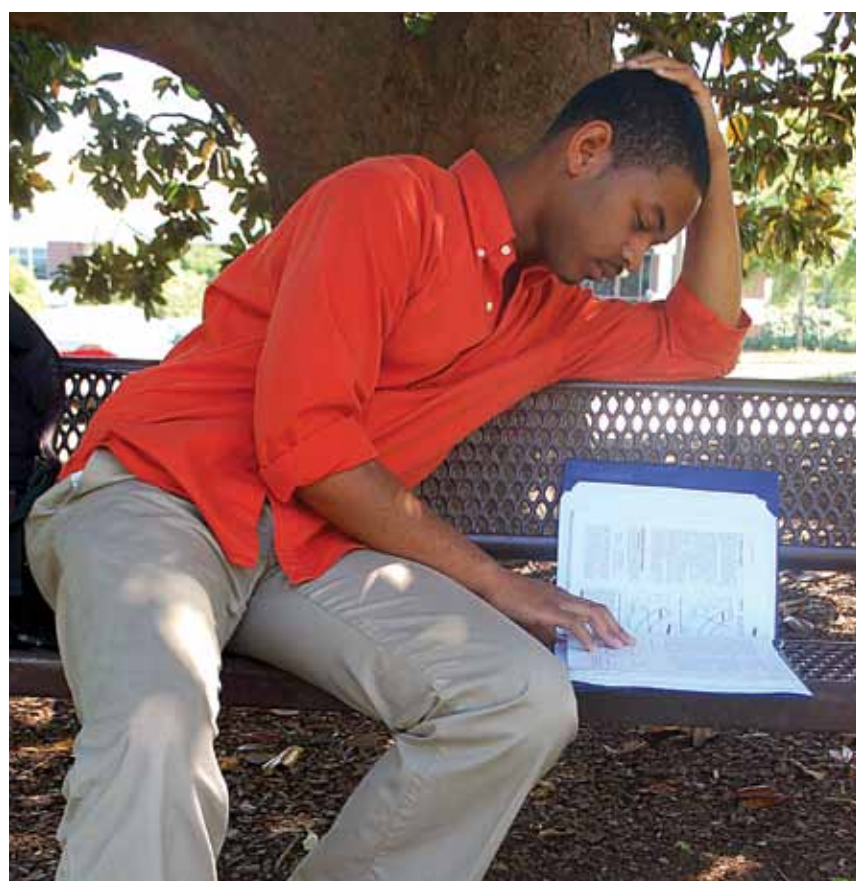
Among the Department of Agronomy and Soils faculty members who will be teaching a variety of classes are Shannon and his fellow professors David Weaver, Edzard van Santen and Beth Guertal, associate professor Gobena Huluka and assistant professor Julie Howe.

While the agronomy and soils department is not the first in the College of Agriculture to offer classes via distance learning—poultry science, fisheries and allied aquacultures and entomology and plant pathology departments offer distance education options—the department is the first to offer these courses as part of a full-fledged graduate degree program.

The agronomy and soils program offers numerous courses online from Auburn and also hopes to work with other universities, such as the University of Florida, that have appropriate online courses that will count toward master's and doctoral degrees in agriculture and science.

Cost for the agronomy and soils courses is \$292 per credit hour for undergraduate-level classes and \$330 per credit hour for graduate courses. Shannon noted that those interested in enrolling for a degree should begin the process soon, though he added that students can begin taking classes toward degree credit up to two semesters before they are officially admitted into Auburn's graduate school program.

To learn more visit www.ag.auburn.edu/agrn/distancelearning/ or contact Megan Ross at mhr0001@auburn.edu or 334-844-3201.



SEE SUCCESS—Animal sciences/pre-vet major Ladarius Lane looks over his notes one last time before taking his final in organic chemistry spring semester. Lane, a rising junior, went home to Woodland in Randolph County for a break after exams but returned to campus in early June to work as a counselor in the Office of Diversity and Multicultural Affairs' Summer Enrichment Experience program. The SEE program brings incoming freshmen from underrepresented populations to Auburn for four intensive weeks of activities that help prepare them for successful college careers. The students get a not-for-credit trial run at freshman calculus and English composition courses, work to improve their study and time-management skills, attend seminars on career options, visit with faculty and advisers in the eight colleges that participate in SEE and explore the resources available to them, all while getting a feel for dorm life, too. The SEE program was launched in 2008 with 16 incoming freshmen, including Lane, participating that first year. This is his second year as a SEE counselor. "The program helped me a whole lot my freshman year," Lane says. "When I got here that fall, I knew my way around and kind of what to expect in my classes. I like being a counselor because I can let them know how much I got out of it."

Student Accomplishments

Two graduate students in the Department of Fisheries and Allied Aquacultures (FAA) earned high honors in student competitions held during the World Aquaculture Society's Aquaculture 2010 in San Diego in early March. **Andrew McElwais**, a Ph.D. student of FAA assistant professor **Ash Bullard**, won second place overall in the student oral-presentation competition with a talk on his research, conducted in Bullard's Laboratory of Parasitology, into a major disease-causing bacterium in both food fish, including channel catfish, and ornamental species worldwide. Master's student **Matthew Lewis** collected one of only three awards presented for best student abstract. Lewis, whose primary adviser is FAA associate professor **Cova Arias**, has focused his master's research on ridding raw Gulf oysters of the deadly bacteria *Vibrio vulnificus*, and his findings could lay the groundwork for an effective post-harvest processing method that would make the oysters safe for human consumption and help spark an increase in demand. Both students received cash awards for their honors.



PHI KAPPA PHI INDUCTEES—College of Ag seniors who were inducted into Phi Kappa Phi, the oldest and most selective academic honor society dedicated to the recognition and promotion of academic excellence in all fields of higher education, were honored at the spring 2010 Graduation Breakfast. They are, from left, Tiffany Cable, Jessica Willis, Meaghan Gonsalves, Kourtney Hundertmark, Erin Cash and Jennifer Barbero.

Spring Awards Presented

In spring 2010, outstanding graduating seniors from the College of Agriculture were honored for their contributions to Auburn University.

John Lee, a senior in agricultural economics, was selected by the AU Student Government Association as the outstanding student in the College of Agriculture.

Jessica Hughes Willis, a senior in animal sciences, pre-veterinary track, was the spring 2010 recipient of the President's Award, which recognizes graduates in each college who possess outstanding qualities of leadership, citizenship, character and promise of professional ability.

The Comer Award for academic excellence in agricultural sciences went to Zachary Hester, who graduated in fall 2009 with a degree in horticulture.

The 2010 recipient of the Claude Hardee Memorial Award in Agriculture, which is awarded annually to recognize an outstanding senior student in the college based on scholarship, leadership and character, was Cody Smith. Smith graduated fall 2009 from the Department of Agronomy and Soils, and is currently working on a master's degree in agronomy at Louisiana State University.

The spring recipients of the Dean's Award for Excellence, which is given to high-achieving graduating seniors who have demonstrated leadership and service in the College of Agriculture, are Lauren Lewis and Tyler Weldon.

The graduation marshal for spring graduation was Meaghan Gonsalves, senior in animal sciences, and the alternate marshal was Tiffany Ann Cable, senior in poultry science.

For more information on all these winners and their many accomplishments, visit www.ag.auburn.edu/adm/student/stories/.



AN EXCELLENT MOMENT—Lauren Lewis, pictured above with College of Ag Dean Richard Guthrie, is one of two College of Ag graduating seniors to receive the Dean's Award for Excellence at the Spring 2010 Graduation Breakfast. Tyler Weldon, who is not pictured, also won the award.

OUTSTANDING SENIOR—Cody Smith, left, who graduated in 2009 and is working on a master's degree at Louisiana State University, returned to campus in May to officially collect the Claude Hardee Memorial Award in Agriculture from College of Ag Dean Richard Guthrie. The award is given to an outstanding senior based on scholarship, leadership and character.



CELEBRITY STORIES—More than 450 high school students showed up on the Auburn campus in April for the first-ever Ag Industry Day, which was held to teach high-school and college students about career opportunities in agriculture and natural resources. Randy Owen, lead singer of the legendary country band Alabama, and poultry science alumnus Randall Ennis, chief executive officer of Aviagen Broiler Breeding, spoke to the students about their successful careers in agriculture. (Yes, Owen's success in the music world has carried over into his farming operation). In addition to these two celebrity speakers, College of Ag departments with undergraduate programs and 23 companies representing the breadth of the agribusiness sector also set up displays. Ag Industry Day 2011 has been set for March 31, 2011. To learn more contact Deborah Solie at das0002@auburn.edu or 334-844-8900, Amanda Martin at amartin@auburn.edu or 334-844-2881 or go to www.ag.auburn.edu/goplaces/agindustry. Pictured, from left, are Ennis, Owen and College of Ag Dean Richard Guthrie.



AG AMBASSADORS HONORED—Several Ag Ambassadors were honored at the Spring 2010 Graduation Breakfast for their service to the college. Pictured, from left, are: Lauren Lewis, Bethany Donaldson, College of Ag Dean Richard Guthrie, Nic Hilyer, Hanna Young and Jennifer Barbero. Best wishes to them all and many thanks for all their help in promoting and supporting the College of Ag!

Discover Your World Returns

Dirty Jobs, How It's Made, Animal Planet, Truth About Food, Deadliest Catch and The Apprentice will all be on the agenda July 23 when the College of Agriculture again hosts Discover Your World: Auburn Edition.

This event brings incoming high-school sophomores, juniors and seniors to the Auburn campus for a day-long, fast-paced leadership and science workshop showcasing natural resource and agriculture careers.

Participating students can participate in two of the six track options listed above and will perform hands-on experiments related to such areas as veterinary medicine, environmental quality, science, global positioning systems and much more.

Learn more at www.ag.auburn.edu/adm/student/prospective/events/summerprogram.php.

Faculty and Staff Accomplishments

Jonathan Davis and **Anne Adrian**, director and associate director, respectively, of the ACES/AG Information Technology Unit, were featured in an article in the spring 2010 issue of *The Higher Education Workplace*. Read the article at www.ag.auburn.edu/adm/comm/documents/IT-article.pdf.

Kathy Lawrence, associate professor of plant pathology, recently received the Syngenta Award for Research from the Society of Nematologists.

Dale Coleman, associate professor of animal sciences, was named the Auburn University Student Government Association's Outstanding Faculty Member in the College of Agriculture and also received the prestigious Algernon Sydney Sullivan Award. Past College of Agriculture recipients of the Algernon Sydney Sullivan award include **Joseph Yeager**, **Joseph Hood** and **William Alverson Jr.**

Conner Bailey, professor of agricultural economics and rural sociology, has been named president-elect of the Rural Sociological Society. Bailey will begin his service in August 2010, will become president of the society in August 2011 and will serve as immediate past president beginning August 2012.

Richard Guthrie, dean of the College of Ag and director of the Alabama Agricultural Experiment Station who will retire Aug. 1, received the first-ever Richard L. Guthrie Award for Achievement in International Agriculture in April. The award was established in honor of Guthrie's commitment to international work across the globe. He also was recently presented with the Excellence in Leadership award from the Southern Association of Agricultural Experiment Station Directors.

The Professional Landcare Network's Academic Excellence Foundation has presented its 2010 Outstanding Educator of the Year Award to **Harry Ponder**, professor of horticulture at Auburn University.

Beth Guertal, agronomy and soils professor, has been named a Fulbright scholar for fall semester 2010 and will teach turfgrass management and sustainable agriculture at the University of Mauritius, located on the island of Mauritius in the Indian Ocean.

Denise Smith, human resources generalist in the College of Ag/AES Administrative Services office, is always helpful, but now she can be particularly helpful to our administrative and professional staff. She has been elected as one of our representatives for the Administrative and Professional Assembly for a three-year term, taking over the spot held previously by **Jane Hoehaver**.

In recent months, several College of Ag staff members have been presented with Auburn University Spirit of Excellence awards, which honor Auburn employees who have gone above and beyond the call of duty in their jobs on campus. The most recent 2010 winners from the College of Ag are **Deborah Solie** in the Student Services office and **Henry Avery** with the Agricultural Land and Resource Management group. Three others were also honored in 2009 including **Ann Gulatte**, also in Student Services; **Kathy Glass** in the Department of Agronomy and Soils; and **Kathleen Swenson** in the Department of Animal Sciences.



Ann Gulatte and Deborah Solie

Patricia Curtis, a professor of poultry science, served spring semester as the 2010 Auburn University Presidential Fellow. She is only the third person to hold a university presidential fellowship since the program was established at Auburn in 2007 by President Jay Gogue to help individual faculty members gain senior administrative experience while applying their expertise in academic disciplines to issues and programs that impact a broad spectrum of the university community. During her spring-semester appointment in the Office of the President, Curtis worked with administrators and faculty to establish an operational and funding structure for the interdisciplinary Auburn University Food Safety Initiative.

Elise Irwin, associate professor of fisheries and allied aquacultures (FAA), and FAA Ph.D. student **Kathryn Mickett Kennedy** recently presented an invited paper at the U.S. Institute for Conflict Resolution on a project they initiated in 2005 with Alabama Power to help stakeholder groups with conflicting environmental priorities collaborate on establishing goals and measures for river management in the R.L. Harris Reservoir.

A Full Count

Tree Campus USA

Urban Forest Research Project Paves Way for Arbor Day Foundation Honor

by JAMIE CREAMER

As of Nov. 30, 2009, some 6,958 trees graced the Auburn University campus.

Nick Martin knows, because he counted them—and, while he was at it, he identified their species, took their measurements, assessed their physical condition and calculated their worth, too.

There was method to Martin's seeming madness. The forestry graduate student was compiling valuable data that not only paved the way for Auburn to earn designation as a tree-conscious and tree-friendly campus but also laid the foundation for a research project that should enhance the beauty, health and function of urban forests in Alabama and throughout the Southeast.

The tree-counting venture goes back to fall 2008, when the national Arbor Day Foundation, with funding from Toyota Inc., established Tree Campus USA, a program to recognize colleges and universities that are committed to planting, protecting, managing and celebrating their trees and to engaging students and the community in ventures related to trees, urban forestry and environmental stewardship.

You might think Auburn, with its lovely, tree-studded landscape, would have been a shoo-in for such an honor, but not so, as Auburn professors and fellow Alabama Agricultural Experiment Station scientists Gary Keever in horticulture and Art Chappelka in forestry quickly discovered.

"Auburn didn't meet all the criteria for applying," Keever says. "First, we had to establish a tree advisory committee and develop a comprehensive campus tree-care plan, complete with designated budget," Keever says.

Though a complete tree inventory was not a Tree Campus USA requirement per se, Keever, Chappelka and Auburn landscape superintendent Charlie Crawford agreed such a catalog would be invaluable, but none had the time, manpower or money to commit to the undertaking.

The solution came in the form of a research grant the U.S. Forest Service awarded to Auburn to evaluate whether a computer program, called i-Tree Eco—developed by Forest Service scientists in the northeast to inventory, analyze the environmental effects of and put a dollar value to urban forests in that region—is valid in southeastern states as well. Requirement number one: a complete tree inventory.

With that funding as well as support from university administrators, Chappelka and Keever recruited Martin to run the study as his master's-degree research project, and Martin began the gargantuan task of collecting detailed information about every single tree on every managed area of the campus. Thanks to global positioning and



DOWN TO SIZE—Above, Nick Martin, foreground, and forestry major Andrew Parker check the trunk size of one of the almost 7,000 trees on the Auburn University campus. At left, Martin collects data on a Comer Hall oak as forestry professor Art Chappelka, left, and horticulture professor Gary Keever look on.

geographic information systems technologies and a few assistants along the way, Martin wrapped up the job in six months.

"We got the species, height, crown width, diameter at breast height, relative health and location of every tree on campus," says Martin.

He has loaded all the information into the i-Tree Eco database, which has calculated that Auburn University's urban forest has a value of \$10 million. He still has some facts and figures to gather, but when everything's in, the model, using not only the structural field data but local hourly air pollution and meteorological data as well, will determine the impact that Auburn's trees have on the environment in terms of air-quality improvements, carbon storage and sequestration, energy use in buildings and pollen levels. In the final stage, Martin will evaluate the accuracy of the findings.

The Forest Service will use results from the Auburn study to adapt the i-Tree Eco model to urban forests in the Southeast, giving other communities and campuses across the region a free tool to assess and enhance their trees.

Meanwhile, the tree inventory allowed Keever and cohorts to develop a revised and expanded campus tree-care plan and submit a complete Tree Campus application to the Arbor Day Foundation. The work paid off earlier this year when Auburn was officially recognized as the first Tree Campus USA in Alabama.

"A recent survey found that 60 percent of prospective college students rated campus appearance as important or very important in

choosing a college," Chappelka says. "We're going to make Auburn the loveliest village in the U.S."

Grounds guru Crawford—a College of Agriculture alum who earned his bachelor's in botany in 1985 and a master's in plant pathology in '88—says Landscape Services set a goal 15 years ago to plant at least 100 trees a year; since then they've averaged 200.

"In 2009, we removed 25 trees, but we planted 974," Crawford says. "We plan to continue increasing our canopy each year."

Auburn Tree Trivia

- The tallest tree on campus is a 136-foot loblolly pine located just south of Plainsman Park.
- The largest as measured by diameter at breast height is a Southern red oak that comes in at 61.3 inches. It is located at the RBD Library, on the southeast lawn.
- That same tree also wins the award for biggest crown width, at 108 feet.
- The Auburn campus boasts more than 130 species of trees, including both native and nonnative.
- The most common trees on campus are crapemyrtles, followed closely by willow oaks.
- The most unusual tree on campus likely is a tungoil tree at the College of Veterinary Medicine.

Venom Scent Says 'Come and Get It' to Fire Ant-Decapitating Phorid Flies

by JAMIE CREAMER

Fire ants, beware: That toxic venom you so angrily plunge into your victims is coming back to bite you.

In a study at Auburn University, entomologist Henry Fadamiro has discovered that compounds in the venom of red imported fire ants release a scent that draws ant-decapitating phorid flies like a magnet, and that new information could help scientists design more effective strategies for controlling fire ants.

Phorid flies are fire ants' worst nightmare, and for good reason. The not-quite-gnat-sized flies lay their eggs in fire ants' chests. When the eggs hatch, the larvae move to the ants' heads and eat out the inside. The heads fall off, and the young flies emerge.

Both fire ants and phorid flies are native to South America, where, as fire ants' natural enemies, the flies help keep ant populations in check. But around 1940, a few of those ants stowed away on a U.S.-bound boat and jumped ship at the Port of Mobile. With no natural enemies to keep them in check, they spread like wildfire across the South.

Since the late 1990s, scientists in Alabama and throughout the Southeast have released hundreds of thousands of phorid flies as a means of biological control of fire ants. The flies are drawn to disturbed mounds, and thanks to Fadamiro's research, scientists now know precisely what attracts them.

In his study, Fadamiro attached electrodes to the tiny flies' even tinier antennae and then exposed the flies to various fire-ant scents, including extracts from the ants' numerous glands. When the flies caught a whiff of ant venom, their antennae went wild. Additional experiments in which flies could pick their favorite scent from among several different ones confirmed that venom gland juice is the aroma of choice.

Auburn entomologist Fudd Graham, who heads the state's fire ant management and phorid-

fly-release programs, says four of the more than 20 phorid fly species are now established in Alabama. One of those species attacks foraging ants; the other three, disturbed mounds. The flies hover over an agitated mound, sizing up their prey,



OFF WITH ITS HEAD—A tiny phorid fly prepares to dive down and inject an egg into a terrified fire ant's chest. In the coming days, the larva will hatch and munch its way into the ant's head, where it will release an enzyme that makes the ant's head fall off. The flies, fire ants' natural enemies in their native South America, are being released in fire ant-plagued states as a means of biological control. (Photo courtesy S. Porter, USDA-ARS)

and then, in the blink of an eye, swoop down, ram eggs into the ants and dart off to strike their next victims. A single female phorid fly can infect as many as 35 ants.

Fire ants have an innate fear of phorid flies and, as Fadamiro says, "start to run helter-skelter" at the first sign of the ant-decapitating flies. Though the flies don't kill enough ants to destroy a mound, their mere presence so disrupts ants' foraging activities that the colony slowly weakens and dies from lack of food.

In Alabama over the past decade, Graham's team has released phorid flies, 3,000 at a time, at 16 sites statewide, and today, at least one species of the fly has been found in every county in the state, Graham says.

"That they've spread that much tells us they've got to be killing ants somewhere," Graham says.

Auburn's Food Science Program Joins Department of Poultry Science



In a strategic move to strengthen its efforts in the discipline of food science and technology, Auburn University will move its food science program from the College of Human Sciences back into the College of Agriculture, its original academic home, beginning Aug. 16.

Within the College of Agriculture, the food science program will become a formal part of the Department of Poultry Science. Three current food science faculty members will become part of the department, and the food science teaching program will become an option within the poultry science curriculum.

"Given that the Alabama poultry industry represents a modern global food industry, moving the food science program back to the College of Agriculture will allow our department and college to better serve the poultry industry's needs," says Don Conner, head of the poultry science department.

"Strengthening our efforts in food science will enhance Auburn's existing programs in live poultry production and will uniquely position the poultry science department to more effectively address critical issues from the farm to the fork," he says.

Auburn University is developing a comprehensive Food Safety Initiative to address critical food safety issues facing our state and nation, and the Department of Poultry Science will play a key role in this university-wide initiative. A strong food science program will provide needed support for research and extension programs in food safety.

For more information on the food science shift contact Conner at 334-844-2639 or connedc@auburn.edu.

System Washes Deadly Germ from Gulf Oysters

Auburn researchers looking to rid Gulf Coast oysters of the potentially deadly bacterium *Vibrio vulnificus* have discovered a way to reduce the bacterial load in live, freshly harvested oysters from 10,000 organisms per gram of meat to three organisms per gram in just six days, all while retaining the distinctive taste and texture raw oyster fans demand.

At the heart of the study is a post-harvest oyster depuration, or purification, system developed by Auburn fisheries microbiologist and Experiment Station scientist Cova Arias in which seawater piped in from the Gulf is treated with UV filters to kill *V. vulnificus* and then flows into and out of tanks containing contaminated oysters. Similar systems have been developed, but they all recirculate the water through the tanks and the contamination levels remain high.

Working with Arias at the Auburn Shellfish Lab on Dauphin Island, graduate researcher Matt Lewis conducted multiple trials in which he varied water temperatures and salinity levels as well as the rates at which it flowed through the tanks. Elevating salinity of the seawater and flowing it through the tanks at a constant rate of 68 liters per minute were the keys to reducing *V. vulnificus* to the almost undetectable levels, Lewis says.

"This experiment requires further testing, but it may lay the groundwork for a post-harvest processing method that can guarantee consumers a raw oyster that is safe and delivers the taste they're looking for," Lewis says.



FRESH FROM THE GULF—Live Gulf oysters sit in a depuration tank at the Shellfish Lab on Dauphin Island where they will undergo post-harvest processing methods designed to rid the mollusks of potentially fatal *Vibrio vulnificus*.

Though *V. vulnificus* occurs naturally in all oceans, the Gulf of Mexico's warm, low-salinity waters are a breeding ground for the bacterium, and, as filter feeders, oysters build up high concentrations of the microbes in their intestinal tracts. Concerns over the severe and sometimes fatal diseases associated with eating raw Gulf oysters have stifled demand and prices in recent years, weakening the oyster industry in Alabama and neighboring coastal states.

Lewis' and Arias' findings could go a long way toward addressing consumers' food-safety fears and toward arguing against a federal proposal to ban Gulf oyster harvesting in the warm-weather months of April through October.

Meanwhile, Arias notes that grave uncertainties over the short- and long-term impacts the Gulf oil spill will have on oysters and on the seafood industry as a whole could boost interest in mariculture oyster farming, in which the mollusks would be cultivated in the Gulf or in ponds or raceways filled with water from the Gulf, and she says the depuration system she has developed would be helpful in establishing such operations.



TOOMERS OAKS—SFWS students harvest the acorns once a year by hand-picking them from the two famous Toomer's oaks. They then plant the acorns and care for the seedlings until they are ready to be sold. Today, offspring from the Toomer's oaks can be found growing in several states. To read stories from Toomer's Oak tree owners, visit www.forestry.auburn.edu/oakes/Stories.html.

School of Forestry and Wildlife Sciences

Toomer's Oaks Program Continues to Support Scholarships, Student Programs

Since 2004, Auburn alumni and friends have been able to purchase a piece of the university's tradition—a seedling grown from a Toomer's Corner oak tree. The effort is an initiative of the School of Forestry and Wildlife Sciences, which uses money from the sales to support student programs.

To date 2,350 oaks have been sold and approximately \$117,000 has been raised through the project. A portion of the money has been used to create an endowment for student scholarships while the rest is distributed to three of the school's student organizations: the Forestry Club, the Wildlife Society and the SFWS Student Government Association. The student organizations use the proceeds to support their various projects and for travel to professional meetings and conferences.

In addition to raising support for scholarships and student programs, another important aspect of the Toomer's Oaks program is to cultivate a replacement tree for the two aging live oaks at Toomer's Corner. The trees are old, under stress and, as is only natural, will eventually die. SFWS sponsors hope that the Toomer's oaks could be replaced with one of the seedlings. In fact, project sponsors are holding several of the trees in order to grow them into larger trees for eventual planting for special purposes. And, by selling offspring of this tree, the students are helping preserve part of the history of Auburn—and make history in the process.

Trees can be purchased online at www.tigerrags.com by clicking on the Toomer's Oak link on the left-side menu. Purchased trees come with a certificate of authenticity, a birth year tag, a roll of toilet paper and growing instructions.

College of Human Sciences

Fulbright Distinguished Chair Awarded to CHS Professor



Alexander Vazsonyi

Alexander Vazsonyi, professor in human development and family studies, has been awarded a Fulbright Distinguished Chair in Social Studies at Masaryk University, the second largest university in the Czech Republic.

Vazsonyi's research and teaching concerning adolescent development and behavior have earned him an international reputation. His studies of youth across cultures, across ethnic and racial groups and across economic groups have highlighted many similarities among teens around the globe.

"Dr. Vazsonyi is an eminent scholar whose cross-cultural and intracultural research has had a major impact on the field of adolescent development," says June Henton, dean of the College of Human Sciences. "The prestige that comes with receiving a Fulbright Distinguished Chair Award is well-deserved recognition of his commitment to intellectual rigor and reflects the outstanding contributions he is making to the College of Human Sciences and to Auburn University."

Fulbright Distinguished Chairs are the most prestigious appointment awarded by the United States Department of State. Of approximately 800 Fulbright grants annually, only 40 are for Fulbright Distinguished Chairs at 22 universities around the world. A presidentially appointed 12-member board selects faculty for the chairs, which are reserved for "eminent scholars with substantial experience and publications in their respective fields." Of the 40 Fulbright Distinguished Chairs, only 13 are designated for the social sciences.

College of Veterinary Medicine

Caldwell Receives Food Animal Incentive Award

Marc Caldwell, resident at the College of Veterinary Medicine, was one of five recipients of the 2010 Dr. Jeffrey W. Tyler Food Animal Incentive Award presented at the 82nd Annual Western Veterinary Conference in February. The award is given to first-year veterinary residents and interns noted for their commitment to food animal practice.

"Auburn has a wonderful tradition of educating and graduating food animal veterinarians," says Caldwell, who began his residency in food animal medicine in January 2009. "This is critically important at a time when food animal and rural practice is suffering from a shortage of new graduates."

An alumnus of Auburn University, Caldwell earned an undergraduate degree in zoology and his doctorate of veterinary medicine in 2006. After working in a mixed animal veterinary practice in Georgia, he returned to Auburn as a resident in food animal medicine and to pursue a Ph.D. under the direction of Kenny Brock, professor of pathobiology.

Caldwell's Ph.D. research focuses on post-exposure treatment of humans against anthrax using an equine-derived hyper-immune plasma. Anthrax is a bacterial disease caused by the bacterium *Bacillus anthracis*, which can survive for years in the soil in the form of spores. The disease has garnered renewed interest following a terrorist attack in 2001 when it was used as a biological weapon.



Marc Caldwell



FABULOUS FINDS—These four species do not usually occur in the same area and highlight the unusual diversity found in the Pine Mountain/Fall Line sandhills area. The photo is a collage of four of the amphibians and reptiles found in the region the Auburn bioblitz team surveyed and include, clockwise from top right, wood frog, eastern diamondback rattlesnake, spring salamander and gopher frog.

This area in middle Georgia—the Pine Mountain/Fall Line sandhills area—is a biodiversity hot spot, blending species such as wood frogs normally found farther north with Coastal Plain creatures such as eastern diamondback rattlesnakes at the northernmost edge of their range. While rich in species, the area is scarce in conservation lands. Exceptions include Franklin D. Roosevelt State Park, Spirewell Bluff State Outdoor Recreation Area and Fall Line Sandhills Natural Area.

Survey results, combined with the lack of protected lands and loss of habitat, highlight the region as a conservation focal point for amphibians and reptiles in the U.S. and Canada.

College of Sciences and Mathematics

Survey Reveals Biodiversity Hot Spot

Four counties in middle Georgia make up one of the richest regions for amphibians and reptiles in North America, according to a recently reported survey by research teams from Auburn University's College of Science and Mathematics and the University of Georgia. The survey documented 62 species and 36 new county records for Talbot, Taylor, Marion and Schley counties and nearby areas.

Dubbed a "bioblitz," the survey featured two teams of students and professors, who raced to find as many species as possible in seven days split across two seasons.

Results of the survey, published in the current *Southeastern Naturalist*, rank this slice of Georgia fourth in "residual species richness" compared to similar-sized yet more studied areas north of Mexico, including Okefenokee National Wildlife Refuge and Great Smoky Mountains National Park, according to Sean Graham, graduate research assistant who organized the "bioblitz" and led Auburn's team.



TREES ROCK—Wyatt Dunn, a fifth-grader at Jones Valley Elementary School in Huntsville, holds a framed copy of the artwork that earned him first place in the 2010 National Arbor Day Poster Contest. His poster was selected as the best from among the winning posters from 45 other states and the District of Columbia. He illustrated the national theme of "Trees are Terrific... and Energy Wise" by contrasting a cheerful yellow house that is protected from the sun's rays by a canopy of trees with an unhappy red house that has no trees and is baking under a blazing sun. Dunn advanced to the national level after winning the Alabama Arbor Day Poster Contest, an annual event that the Alabama Cooperative Extension System co-sponsors. Calhoun County Extension Coordinator David West and Dunn's parents and art teacher traveled with the award-winning artist to Nebraska City, Neb., April 30 to attend the National Arbor Day Celebration, where Dunn received a \$1,000 U.S. Savings Bond, a lifetime membership to the Arbor Day Foundation and the framed poster and had a tree planted in his honor at Arbor Day Farm. The 2010 poster contest drew entries from more than 70,000 fifth-grade students nationwide. (Photo courtesy Robin Conn, Huntsville Times)

Backyard Wisdom Website Gets a Makeover



LOOKING LOVELY—The new banner for the Backyard Wisdom site was designed by Hannah Dixon, graphic designer in the College of Ag/AAES Ag Communications office.

Spring brought new features and a fresh new look to Backyard Wisdom—a gardening website that complements the weekly Troy University Public Radio program.

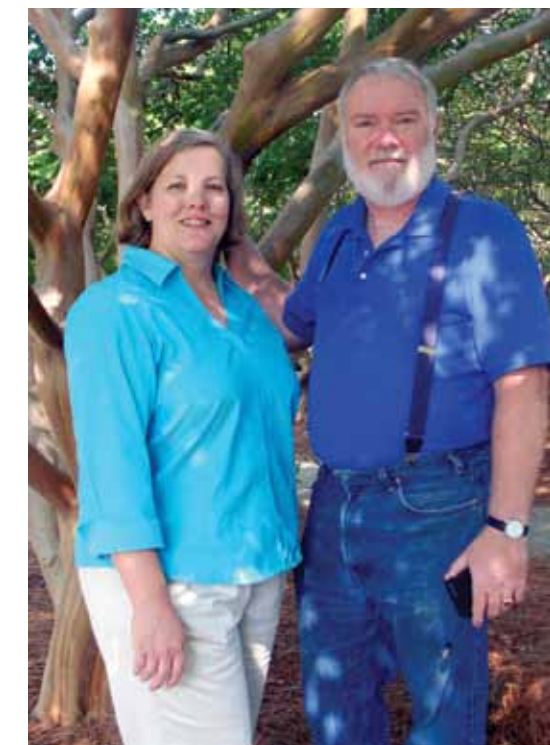
The revamped site—still at backyardwisdom.info—continues to offer a blog written by Backyard Wisdom host Maggie Lawrence, but now, readers can post their comments and chime in on Lawrence's observations on gardening and nature.

The new design also allows readers to subscribe to an RSS feed, join Backyard Wisdom on Twitter, bookmark entries and share them through e-mails and other social media options and link to the audio of past shows.

Backyard Wisdom, underwritten by the Alabama Cooperative Extension System and the Alabama Agricultural Experiment Station, debuted on Troy Public Radio almost six years ago, and shortly after that, the website was launched.

"It was long overdue for a change," Lawrence says.

Backyard Wisdom airs on Troy University Public Radio Saturdays at 2 p.m. CST, just ahead of organic gardener Mike McGrath's



GARDENING GURUS—Backyard Wisdom host Maggie Lawrence, communications specialist for the Alabama Cooperative Extension System, stands with Auburn horticulture professor and Extension horticulturist Raymond Kessler, who is a frequent guest on the Saturday afternoon radio program.

You Bet Your Garden. Backyard Wisdom features Extension specialists, AAES researchers and Auburn University College of Agriculture faculty sharing information and tips on home-gardening issues.

The Troy radio station covers central and southeast Alabama, southwest Georgia and the Florida Panhandle.

Sumter 4-H Volunteer Named Region's Best



Patricia Bryant

Alabama 4-H has named Patricia Bryant of Sumter County as the 2010 Southern Region 4-H Salute to Excellence Outstanding Lifetime Volunteer in recognition of her contributions and commitment to 4-H and the youth in her community in her 18 years as a 4-H volunteer.

Bryant, who also was Alabama 4-H Volunteer of the Year in 2008 and was inducted into the Alabama 4-H Wall of Fame in 2009, was cited for her work to engage youth, recruit volunteers statewide and raise funds to support 4-H activities.

"Patricia is one of those rare individuals who works tirelessly and quietly to better the lives of youth in Alabama," says Gaines Smith, director of the Alabama Cooperative Extension System. "She does it because she has a true passion for youth development, and we congratulate her."

Lamar Nichols, Extension's assistant director of 4-H and Youth Development, agrees.

"Patricia has dedicated her life to ensure that children throughout Alabama receive the best learning opportunities that can be experienced by participating in 4-H," he says. "We appreciate her as a volunteer and know that youth in her care are better prepared for life because of her."

Nichols says Bryant feels strongly that leadership and citizenship are core pieces of the life-skills learned in 4-H, and the educational programs and field trips she coordinates for 4-H youth help instill these qualities.

North Sumter Junior High School principal Elijah Bell says 4-H isn't the only area where the Epes resident gives of her time.

"She has been a very viable asset to this community," Bell says. "The school clubs and other organizations could not make it without her guidance."

Bryant and the 2010 winners in the Northeast, North Central and Southwest 4-H regions now will vie for the national Outstanding Lifetime Volunteer award.

The National 4-H Salute to Excellence Volunteer Recognition Fund was established by Gene and Sharon Swackhamer to emphasize the important work of 4-H volunteers across America. The awards, made possible through the fund and Monsanto Company, recognize 4-H volunteers who demonstrate exemplary service to 4-H while promoting service through volunteerism as both an opportunity and a privilege. Volunteers are awarded in two categories: Lifetime Volunteer, for more than 10 years of service to 4-H, and Volunteer of the Year, for less than 10 years of service.

4-H is a community of six million young people across America learning leadership, citizenship and life skills. National 4-H Council is the private sector, not-for-profit partner of National 4-H Headquarters (USDA). The 4-H programs are implemented by the 109 Land Grant universities and the Cooperative Extension System through its 3,100 local Extension offices across the country. Learn more about 4-H at www.4-h.org.

In Alabama, more than 65,000 youth are 4-H members who participate in competitions and activities through in-school programs, community clubs and special interest groups. For more on Alabama 4-H, go to www.Alabama4H.com.

Calendar of Events

June • 2010

s	m	t	w	th	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			

July • 2010

s	m	t	w	th	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

August • 2010

s	m	t	w	th	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				

Now through Aug. 26

The Market at Ag Heritage Park

Thursdays, 3-6 p.m.

Auburn

The Market at Ag Heritage Park is a growers-only farmers market featuring fresh local produce, goat cheese, honey, stone-ground grains, plants, baked goods, educational exhibits, cooking and gardening demonstrations and much more. It is open to the entire community and is held each Thursday through Aug 26.

Contact: Laura Herring at 334-321-1603 or herrilm@auburn.edu

July 5

Independence Day Holiday Observed

July 23

Discover Your World: Auburn Edition

Auburn

This one-day program highlights opportunities in agriculture for students in grades 10 through 12. Through hands-on programming, students learn about pre-vet, environmental quality, global positioning systems and much more.

Contact: Deborah Solie at das0002@auburn.edu or www.ag.auburn.edu/adm/student/prospectivel/events/summerprogram.php

Aug. 9

Summer Graduation Breakfast

Ham Wilson Arena

Auburn University

Auburn

Summer 2010 College of Agriculture graduates and their families are honored at this breakfast hosted by the AU Agricultural Alumni Association and sponsored by the Alabama Poultry & Egg Association.

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

Aug. 26

Montgomery Young Alumni-Meet the Dean

Riverwalk Stadium

Montgomery

This event will feature a Biscuits baseball game and the chance to meet the new College of Ag Dean Bill Batchelor. Cost is \$10 per person (the price of a ticket). It is hosted by the College of Ag Office of Development and the Auburn Ag Alumni Association.

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

Got Mail? We Hope So!

When the April issue of *Ag Illustrated* showed up in your mailbox, you may have noticed that the address was correct, but the name likely belonged to someone else—possibly even a complete stranger. Needless to say we had a little malfunction with our mailing list labels, but we hope that, with this issue, all is back to normal.

If this issue's mailing label still has problems, if you are getting too few or too many copies, or if you simply need to update your address label, let us know by calling 334-844-5887 or sending an e-mail to agcomm@auburn.edu. And if by chance you get a voice mail message when you call, please leave a message and we will make the changes or call you back to clarify those changes. Oh, and thanks to all of you who did contact us about the problems! It was great hearing from you even if it was for a vexing database malfunction.

Non Profit Org.
U.S. Postage
PAID
Midland, MI
Permit No. 135

COLLEGE OF AGRICULTURE
107 COMER HALL
AUBURN, AL 36849-5401
www.auburn.edu
www.ag.auburn.edu



Recipe File

Market Fresh!

Farmers Market Vendors Share Recipes

Kyle and Melanie Payne have been coming to The Market at Ag Heritage Park summer farmers market since it opened in 2004 and, as with many of their fellow vendors, they have built a faithful following of customers who show up each week during the summer to get a supply of goat cheeses, milk, soaps and lotions. Whether you're already a big fan of goat cheese or are just learning to appreciate its wonderful flavor, the following recipe is one of many options for using goat cheese for a gourmet dish.

Oven-Fried Goat-Cheese-Stuffed Chicken Breast



Kyle and Melanie Payne

- 2 tbsp. olive oil
- ½ c onion, diced
- 1 c fresh spinach leaves
- 6 boneless, skinless chicken breasts
- 4 oz. plain or veggie Bulger Creek Farm, LLC goat cheese
- 1 egg
- ½ c milk
- ½ tsp. garlic powder
- ½ tsp. salt
- ½ tsp. pepper
- 1 c flour, (any type)
- Wooden toothpicks
- Olive oil spray

Sauté onions in olive oil. Add spinach and sauté until leaves are wilted. Set aside to cool. Split each chicken breast by cutting a horizontal slit about 2-3 inches long. In a bowl, mix goat cheese, onions and spinach. Stuff each chicken breast and close with a toothpick. Whisk egg and milk together. Mix garlic, salt and pepper into flour. Dip each chicken breast in the egg mixture and then roll in the flour mixture. Spray a casserole dish and place each chicken breast in dish. It is best if they do not touch. Bake at 350 degrees for 45 minutes or until browned.