Mississippians show interest in community-supported agriculture programs... Page 4
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On the Cover: Community-supported agriculture grows as more Mississippians become interested in buying locally grown produce. (Photo by Kat Lawrence)

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Chickasaw County Extension Service Master Gardener President John Walden, left, visits with “Express Yourself” artist Amanda Williams during the Art in the Park event in downtown Houston. Judy Duncan and Barbara Boydston of the T.K. Martin Center brought artwork and clients to the event. (Photo by Scott Corey)

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Fall is the busiest season of the year on a university campus. It is the beginning of a new academic year, members of a new freshman class arrive on campus to begin their university experience, and fans from far and wide descend on campus for football weekends. Fall 2011 has been especially busy at MSU. The university’s enrollment this fall reached a record 20,424 — up from 19,644 in 2010 — and division units are part of the growth trend. For 2011, the College of Veterinary Medicine had the university’s highest percentage increase. The 441 students enrolled in CVM academic programs represented an increase of almost 9.5 percent over 2010 enrollment.

There are also other types of growth and achievement in the Division of Agriculture, Forestry and Veterinary Medicine (DAFVM).

Keeping our buildings and other facilities up-to-date is an important part of attracting students and faculty to Mississippi State. One of the major building projects in DAFVM has been the renovation of the Lloyd-Ricks-Watson Building, which was completed in fall 2010. Departments in the College of Agriculture and Life Sciences moved back into the campus landmark for the fall 2011 semester. The facility’s historic character has been retained, but classrooms, offices and meeting rooms all have up-to-date technology.

Construction is underway on a new office and laboratory building for MSU Extension personnel and MAFES scientists at the Delta Research and Extension Center in Stoneville. The project is expected to be completed this spring.

Renovations are continuing at the Wise Center, home to CVM, the Department of Animal and Dairy Sciences and the University Television Center. An important part of the work is the renovation of CVM’s diagnostic laboratory necropsy area.

State-of-the-art laboratories are critical in training the young scientists our state and nation need. They are also necessary in continuing the university’s strong commitment to research in support of the state’s #1 industry — agriculture. The National Science Foundation currently ranks MSU 6th in the nation in agricultural research expenditures.

Filling key administrative positions with highly qualified and experienced individuals is also necessary for maintaining the quality and growth of our academic, research and outreach programs. Dr. Gary Jackson assumed the duties of director of the Mississippi State University Extension Service on January 1, 2011. Under his leadership, MSU Extension is upgrading the technology necessary to deliver educational outreach programs throughout the state. Distance education opportunities made possible by interactive video connections to all 82 county Extension offices and the effective use of social media are priorities, but Dr. Jackson also is working to ensure that county offices all have the staff and other resources needed to provide personal service to Mississippians.

Also during 2011, Dr. George Hopper was confirmed as director of the Mississippi Agricultural and Forestry Experiment Station and dean of the College of Agriculture and Life Sciences. He continues to serve as dean of the College of Forest Resources and director of the Forest and Wildlife Research Center. Consolidating the administration of DAFVM’s two research units and two of our academic units provides a more efficient management structure and allows us to better coordinate funding efforts.

The growth of our student population, the continuing success of the university’s outreach programs, our national prominence in research and physical plant improvements have all taken place in the face of the recent economic challenges. I am confident the faculty and staff of DAFVM, with the support of our stakeholders, will continue to improve the lives of all Mississippians through outstanding educational programs and quality research.

Gregory A. Bohach
Mississippians who want the freshest blueberries and butterbeans have more options as community-supported agriculture programs increase.

Kimberly Morgan, an agricultural economist and professor with the Mississippi State University Extension Service, said Mississippians are participating in a trend that began within the past 20 years.

“As more people become interested in buying locally grown produce, we’re seeing an increase in the number of farmers’ markets and community-supported agriculture, or CSA, programs,” Morgan said. “Mississippi’s 10 CSA programs are clustered around Memphis, Jackson and Mobile, a pattern that exemplifies the national trend of typical CSA customers, who live in or near a major city and seek out locally grown food items.”

In CSA arrangements, growers invite a set number of customers to invest by buying shares in exchange for a predetermined amount of produce provided over a set period of time. Morgan said advantages for farmers include cash flow early in the season to help offset expenses, a guaranteed outlet for products and an opportunity to market their produce before they begin spending long days in the field. Satisfied customers become repeat clients and provide priceless word-of-mouth advertising.

When Mike Steede retired as county director for the George County Extension Service, he and his brother Heath had been growing some watermelons and vegetables on their family farm.

“I learned about CSAs from Gary Bachman, of Southern Gardening fame, who explained the concept to me and talked about how much he and his family enjoyed fresh produce straight from the farm,” Steede said.

An Internet search directed him to the Local Harvest website, an online source for finding locally grown foods. After careful research, the Steede family launched their new business.

“The first year, we had 36 members and about four acres of produce,” he said. “We had a lot of extra produce to sell to farmers’ markets, restaurants and at the farm. The second year we had 68 members and four acres of produce. Most of the crop went into the CSA and a couple of restaurants.”

Steede Farms has been a family operation for more than a century. Mike and his wife Darlene, son Garrett and daughter Shelby, along with Heath and his wife Mandy and their son Gunter are all owners of the CSA.

“The biggest lesson we learned is that if you will be honest with your members about what is happening at the farm, most of them will understand and be very patient,” Steede said. “Our first season was cut short...
due to extreme heat, and our members were very understanding.

“We also worried about the lack of variety of veggies late in the season, so we talked to our members at the drop points. To our surprise, we were the only ones with that concern,” he said.

Though he retired from his career in the MSU Extension Service, Steede remains an educator.

“The ideal farmer must be willing to educate,” he said. “Folks ask questions about everything, and we must be open with our members. We also must not mind folks coming around the farm to see what we do.”

The CSA model does not require vast tracts of farmland to be successful. Urban farms measured in square feet of bed space instead of acres can produce enough fruits and vegetables to operate a small CSA.

Sam McLemore, a 2009 MSU graduate in landscape contracting, operates Bountiful Harvest Farms in downtown Starkville using 6,000 square feet of raised beds. McLemore, who started his CSA to create a source of organic food for his family and community, said CSAs are ideal for someone getting started as a producer.

“The CSA model can work anywhere that people think about what they eat,” McLemore said. “By investing through the CSA, the community is supporting my effort to produce something they need. Bountiful Harvest Farms is successful because our community is dedicated to providing fresh, local, naturally grown produce to their families.”

Clients such as Christopher Williams, who has been a member of Steede Farms’ CSA since its inception, are a key part to the continuing success of the CSA model, because they value the connection to food grown locally by someone they can trust.

“I grew up on a farm, and we always had a garden,” Williams said. “When I moved to the city, I really missed fresh vegetables. We have a young daughter, and we wanted to provide her with healthy food. I like doing business with someone I know and keeping those dollars in Mississippi.”

Williams said he appreciates the quality of the produce received from Steede Farms.

“The difference in something that has been picked fresh that morning compared to something that has been shipped across the country is huge,” he said. “The variety has been fun. Sometimes it was a challenge to figure out what to do with vegetables that were new to us, but we have found several great new recipes because of it.”

Clients come to understand how much work goes into farming.

“In Mississippi, we’re blessed to be able to sit down to a fabulous meal and have everything on the plate raised within our state,” Williams said. “I believe being a member of a CSA helps keep that possible.”
Growing a foot per day, kudzu has taken over the Southern landscape, covering nearly 7 million acres.

Now listed as a federal noxious weed, kudzu was imported to prevent soil erosion and for use as both a forage crop and an ornamental plant. The semi-woody plant covers large tracts of land from eastern Texas to the East Coast and as far north as Maryland, with the cost in unproductive land estimated in the millions. Kudzu climbs, covers and eventually kills trees, destroying the timber-producing value of these lands.

A recent Mississippi State University study evaluated the after-tax financial returns of controlling kudzu with herbicides and then planting pine or oak plantations on lands formerly covered by the vine.

“As the population grows and land use changes over time, the need to reclaim unproductive areas where kudzu has taken over is essential for timber production,” said Donald Grebner, forestry professor and economist in the university’s Forest and Wildlife Research Center. “In addition to timber production, an increase in the amount of area useable for wildlife habitat and recreation could improve the financial stability of local economies.”

To determine financial returns of reclaiming kudzu-covered land, scientists first needed to determine the most effective herbicide and application method to kill the creeping invader.

MSU Forestry Department Head Andrew Ezell has evaluated the impacts of alternative herbicide treatments on kudzu patches in the state for more than 20 years. He, along with colleagues in South Carolina, treated patches of the weed and then observed growth estimates four times after initial application.

For this study, scientists compared seven different management regimes for eradicating kudzu patches and then establishing either pine or hardwood plantations. Management scenarios included using different herbicide applications, different types of chemical dispersal methods and different species to plant after eliminating the vine.

“Controlling kudzu is difficult and expensive,” Ezell said. “Many of the herbicides that can be used to control kudzu affect the soil such that trees can’t be planted immediately after application.”

The study found a broadcast application of Escort XP — a selective herbicide manufactured by DuPont — to be the most cost-effective way to control kudzu patches. Escort XP is appropriate for both young and old kudzu patches, and it works for reforesting the area with pine or oak.

Forest economists used the land expectation value on an after-tax basis to evaluate the feasibility of the control regimes. Land expectation value is the present value of all future costs and revenues of an asset, including forestland.

“For example, treating kudzu aerially with Escort XP and then replanting in pine would yield an estimated $1,460 per acre in revenue after taxes,” Grebner said.

An aerial application of herbicide followed by replanting in oak would yield an estimated $317 per acre.

“The biggest difference in the two is the maturity time, with pine having multiple cuttings in a shorter period of time and oak only having one cut at 30 years and then final harvest at 50 years,” Grebner said. “However, by removing kudzu and planting in either oak or pine, the land expectation value increases.”

Ezell said controlling kudzu with herbicides can be a costly venture, especially for private landowners.

“Fortunately, there are multiple federally funded cost-share programs that offer assistance to private landowners to combat the spread of nonnative invasive plants such as kudzu,” Ezell said. “Incentive programs offered through the government have paid up to $87 per acre to eradicate the invasive plant.”

The impact of these programs on a landowner’s revenue stream can be substantial. Recovering any portion of initial cost to control kudzu will reduce costs while boosting their monetary returns, leading to higher land expectation values.

“Clearly, landowners can reap both environmental and ecological benefits by turning unproductive, kudzu-covered land into forest,” Ezell said.
A new broadband initiative seeks to help Mississippians connect to new technology, increasing access to a wide range of community and economic development opportunities.

Broadband refers to devices that provide greater telecommunications connectivity than standard devices, such as dial-up. Broadband allows quick and efficient Web browsing, which can increase business productivity and public access to educational resources and health care services. Broadband is available through local telephone companies, cable providers and some wireless networks.

A large portion of the state’s population still lives in small towns and rural areas, and it can be difficult for private companies to justify the expense of supplying high-speed Internet access to these hard-to-reach places.

In 2009, Gov. Haley Barbour made broadband connectivity for the state a priority and spearheaded the creation of the Mississippi Broadband Connect Coalition. The MBCC is currently developing a comprehensive statewide plan to increase the availability of broadband and improve the digital literacy of Mississippians.

As part of the state’s comprehensive broadband initiative, the Mississippi State University Extension Service, along with the Southern Rural Development Center (SRDC), located on the MSU campus, have partnered with the Office of the Governor to help communities improve their access to and use of broadband services. The Extension Broadband Education and Adoption Team, called e-BEAT, is made up of state and regional Extension educators. The Office of the Governor supports the project with funds made possible by the American Recovery and Reinvestment Act.

“We are launching this important initiative by organizing citizen-based advisory councils in six regions of the state to guide the education and technical assistance activities of e-BEAT,” said Bo Beaulieu, SRDC director and project director. “These advisory councils and Extension educators make it possible for e-BEAT to implement broadband adoption strategies that respond to the unique needs of the households, businesses, local governments and other key institutions in each region.”

Representatives from SRDC, MSU’s Computer Application and Services and the School of Human Sciences are part of e-BEAT. In addition, two regional coordinators are located in Extension offices in Newton and DeSoto counties, and four coordinators are housed at MSU’s Research and Extension Centers in Biloxi, Verona, Raymond and Stoneville. The e-BEAT initiative officially launched in July 2011 and will continue through December 2014.

“We are going to work with key people in the community to help them organize efforts to improve the use and application of broadband in their areas,” said Chip Templeton, Extension broadband coordinator for the northeast region of the state. “But in some instances, we may need to start with the basics because some people and businesses may not even own computers. We’ll help improve awareness of how connecting to the World Wide Web can benefit people and their communities.”

Beaulieu said to better understand broadband use in Mississippi, e-BEAT is completing a statewide broadband survey of Mississippi households. By knowing who uses broadband and in what ways, and by understanding the impediments to adoption, e-BEAT, the Mississippi Broadband Connect Coalition, and the regional advisory councils can better work together to help overcome these barriers.

“Having good broadband connections allows families and small businesses to gain access to helpful services,” Templeton said. “It can help put people in touch with educational and health resources. We are tremendously excited to help Mississippians become broadband complete.”

Gary Jackson, director of the MSU Extension Service, feels the initiative will help educate the public about the importance of adopting new technology.

“Extension is dedicated to developing new informational technology to help Mississippians gain access to the information highway,” Jackson said. “I’m excited about what this new initiative is going to do and how it will complement our instructional technology efforts.”

Beaulieu said e-BEAT will work not only to improve the lives of individuals but also to offer communities new ways of strengthening their local economies.

“Helping Mississippi communities improve their access to broadband has the potential to generate a number of positive impacts. For example, high-speed Internet access has been shown to improve workforce productivity and allows businesses to market their products on a greater scale,” he said. “People will have access to resources that will help them grow new businesses or expand existing enterprises, and that is important in today’s global marketplace.”

For more information on the broadband initiative, visit http://www.broadband.ms.gov.
Two sisters who like bugs and spiders and getting their hands in dirt found their calling from those activities at summer camps hosted by Mississippi State University.

Breanna and Deanna Lyle, twins from Aberdeen, went to their first “bug camp” in the summer before they entered the 11th grade. Now, the college sophomores are ahead of many classmates as they pursue careers in entomology and horticulture.

Patricia Drackett, director of MSU’s Crosby Arboretum in Picayune, said after getting to know the sisters while working at entomology camps, she realized nature and insects were not just a passing interest for them. The Lyles spoke knowledgeably about the characteristics and habits of different species.

“A fascination with buzzing, potentially stinging insects might make high school students seem rather unusual. But in the summer bug camps, the twins were totally immersed in their element, along with others who had the same enthusiasm for the subject,” she said.

The camps combine faculty and staff from two MSU departments: the Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology and the Department of Wildlife, Fisheries and Aquaculture. Many of the activities take place on campus in the Clay Lyle Building, where participants work on their insect collections in the labs, hear presentations by the entomology professors, and tour the Entomology Museum and the insect-rearing lab.

“The entomology camp provides great exposure for anyone who might have a spark of interest in a career focused on insects,” Drackett said. “By attending the camp in the context of the university, campers receive invaluable exposure, seeing firsthand exactly where such an interest can lead.”

In recent years, Deanna and Breanna have volunteered at the Crosby Arboretum’s BugFest, an insect event held each September. The girls work alongside MSU faculty and staff members to teach about spiders and insects to hundreds of visitors, particularly elementary school students. They recently assisted at the Arboretum’s Summer Nature Camp.
John Guyton, associate Extension professor of wildlife and fisheries, said even before the camp, the Lyles were well known in their school and community for their love of entomology. The camp introduced them to the importance of insect-plant interactions, a major focus of the camp.

"Participants explore the world of insects and plants, and through their camp experiences, Breanna realized she wanted to pursue a career in entomology. Deanna’s love was in plants," he said. “Many freshmen and sophomore students are still deciding career paths, but the Lyles were sure the first day they stepped on campus.”

Guyton said their camp experiences have impacted courses they have taken in college.

“It’s not unusual for them to take advanced classes normally reserved for seniors and graduate students, then to excel in them,” he said.

The sisters agree they came to camp with a mutual interest in things that crawl, but their academic and career paths have split. Breanna remains interested in entomology and is working in that academic department. She has a special interest in medical entomology and anything with spiders.

“Medical entomology is about how insects impact human health,” Breanna said. “I’m also interested in the taxonomy of jumping spiders. They are very small with large front eyes. They are just about as adorable as they come.”

Deanna, on the other hand, became inspired by a camp speaker with an enthusiasm for horticulture.

“Many of the things I learned at camp have helped me in classes here at State. One example is a plant scavenger hunt that we did in a plant science class,” Deanna said. “We did a similar project at camp, and it was so much fun. Plus, we learned a lot.”

Deanna said camp professors are “helpful, wonderful people” who provide useful information and lay a good foundation for future class work.

“You learn things that can help you, no matter what your career is now or will be in the future,” she said.
Rocking B Cattle Ranch:

“Tradition and Innovation”

By Bob Ratliff

Rocking B Cattle Ranch is a place where more than 150 years of family history, 21st century livestock genetics and Brahma cattle all meet.

Located at the end of a quiet country lane near Wiggins in Stone County, the ranch headquarters is home to Shep and Tracey Batson and their three daughters: Reagan, 13; Hadley, 7; and Arrah Beth, 2. At Rocking B, there is a strong commitment to family and to the land, which began in 1841 with a grant of land signed by President Martin Van Buren to Shep’s great-great-great-grandfather John Deal.

Raising livestock, primarily cattle, is also part of the family heritage. Sheep were important as late as the 1940s, but when Shep Batson’s father, Archie, graduated from Mississippi State University in 1964, he began breeding primarily English breeds of cattle — including Hereford and Angus — with Brahma bulls. He and his wife, Sue, and children Kim, Shep, and Brandy operated ABC Cattle Company, and Brahma cattle soon became a passion.

“Brahma just grow faster and do better in our climate,” the elder Batson said. “They can utilize things that the English breeds won’t even eat.”

The Brahma breed originated in India and has had a reputation in this country for having a bad temper, due mainly to the use of “wild bucking Brahma” bulls in rodeos. That reputation, however, is undeserved, according to Archie Batson.
“Brahman cattle respond to how you treat them,” he said. “If you treat them rough, they respond rough, but I would rather work Brahman cattle than any other breed. My granddaughter Reagan says they have their individual personalities and remind her of people.”

By the early 1970s, the Batson family started hunting for polled, or hornless, genetics in the Brahman breed.

“Cattle have to be dehorned for feed lots to take them,” Archie Batson said. “Dehorning itself is not expensive, but it’s followed by weight loss, and that can cost the cattleman a lot of money.”

Both Archie and Shep Batson agree that using genetics to produce polled calves has been the key to their success with Brahman cattle.

“It is just more economical if the bull dehorns them for you,” Shep Batson said. “It causes a lot fewer problems.”

However, widespread acceptance of polled Brahman by cattlemen was slow.

“The first polled Brahman calves were sorry, knotty calves, and no one wanted to do anything with them,” Shep Batson said. “But Daddy, against my wishes, was bound and determined to do something with them, and thank the Lord he didn’t give up on them.”

In 1974, Archie Batson acquired the ranch’s first registered polled Brahman cows from a ranch in Florida, but finding a good polled bull for the herd was a problem.

“At that time, there weren’t any good polled bulls, but I knew there was such a thing,” he said. “One day a guy got me to go down to Saucier to help catch a wild Brahman bull yearling. When I roped him, I could tell he was naturally polled. When we got him in the trailer, the guy asked me, ‘Now that I’ve got him, what am I going to do with him?’”

Batson bought the bull on the spot for his breeding program and soon determined that the young bull had a special genetic trait. He was homozygous, which meant the polled gene would be passed along to all his offspring.

“We bred him to Holstein cows, and he produced good calves, and every one of them was polled,” he said. “The only problem was he wasn’t registered.”

That problem was solved in 1978 when Batson bought his first registered polled Brahman bull, LH 3, in California, laying the foundation for the registered polled Brahman herd at Rocking B today.

“Somewhere down the line, we acquired a registered homozygous polled Brahman bull — the only one known to exist at the time. That was Mr. Esto 28/8, from a Florida ranch. Mr. Esto turned out to be a rare find, a registered homozygous polled Brahman bull — the only one known to exist at the time.”

“I bought him as a yearling over the telephone just on his pedigree,” he said. “He turned out to be homozygous and improved our quality. That opened a lot of doors for us.”

Purchasing quality animals, followed by using genetic testing and maintaining good performance data has put the Batsons at the forefront of the polled Brahman cattle industry in the U.S. The Rocking B operation specializes in overseas sales of semen and embryos from the herd, and there is strong demand, especially in countries with tropical or arid climates.

“Some of our biggest customers are in Australia,” Shep Batson said. “Brahman and Brahman crossed with other breeds are about all that can make it in parts of Australia because of the hot, dry climate.”

Shep Batson, who is serving as director of the American Brahman Breeders Association and president of the Mississippi Brahman Association, also sees a bright future for polled Brahman in this country, especially in the Southeast.

“In the southeastern United States, you need the Brahman influence in cattle to handle the heat,” he said. “Now there is a trend toward crossing Brahman with Angus and other breeds to get Brahman genetics into commercial herds, which is good for us and for the overall beef industry.”

While Archie and Shep Batson have made significant contributions to the beef cattle industry in south Mississippi and beyond, they are not likely to be the last in the family to do so, according to Brad Jones, 4-H agent with the Stone County Extension Office.

“Shep’s daughter Reagan shares her father’s and grandfather’s passion for Brahman cattle and at 12 is a veteran of livestock shows, and her 7-year-old sister, Hadley, is already participating in shows,” Jones said. “Their family, with their love of the land and dedication to improving the cattle business is an example of what makes this country’s livestock industry great.”
Scientists at Mississippi State University are working with biologists in Missouri’s Ozarks to get the “bear” facts on one of the largest mammals in the Southeast.

The Missouri Black Bear Project, which will be completed next year, is expected to provide valuable information on estimating populations in Mississippi. A study by scientists in the MSU Forest and Wildlife Research Center in the late 1990s indicated more than 70 percent of Mississippi residents favored increasing the black bear population.

While the goal of the Missouri project is to determine the current size of the state’s bear population, MSU scientists hope to refine their techniques in estimating populations. They also want to learn how bears use areas within their home ranges and colonize large expanses of unoccupied habitat.

The research, which seeks to estimate the number of bears in Missouri, includes Forest and Wildlife Research Center scientists, along with the University of Missouri, Missouri Department of Conservation and Safari Club International Foundation.

Jerrold Belant, associate professor of wildlife ecology and management, leads the MSU effort. He said the information and skills gained in this study can be applied to the statewide bear management program begun in 2002 by the Mississippi Department of Wildlife, Fisheries and Parks.

“We clearly have black bears in Mississippi, but we do not know how many,” Belant said. “Missouri has a similar situation, with even more black bear sightings and reports than Mississippi, but no one has a good population estimate.”

To estimate population size, researchers lure bears to specific areas where samples can be collected.

“Hair snares were constructed by using a strand of barbed wire to encircle small areas of at least three trees where bears have been seen, based on 20 years of sightings and reports of bears in the southern portion of Missouri,” Belant said. “Bears are lured to the enclosed areas with fish oil and other scents, and samples of their hair are collected.”

Approximately 380 hair snares were placed in areas thought to have been frequented by black bears during summer months. Clay Wilton, a student in the MSU Department of Wildlife, Fisheries and Aquaculture, and field technicians checked the snares every 10 days to collect samples.

“Hair samples caught in the snares are sent to the University of Missouri for DNA profiling,” Wilton said. “Genotyping through DNA analyses allows us to identify individual bears, which we can use to estimate how many are in the area.”

Motion-activated cameras placed at select snares also monitor the activity of bears entering the sites. This data helps assess how effective the snares are.

Biologists also use doughnuts as bait to lure bears into steel culvert or barrel traps with drop doors that confine the animals. About 25 traps are placed, baited and monitored in the hills of the Ozark Mountains.

Global Positioning System (GPS) collars are placed on captured bears that enter one of the baited traps.

“Thus far, the research crew has caught and released 49 bears. Thirty of them have been equipped with GPS collars,” Belant said. “The GPS collars allow us to track the bears and better understand their home range.”

While the project has just begun, preliminary results indicate that the bear population is not as big as Missouri residents thought. The study has also revealed similarities between Mississippi and Missouri.

Bears were once abundant in Southern states, but populations are diminishing from overhunting and land conversion. Scientists suspect that most bears now residing in Missouri and Mississippi originated from restoration efforts in neighboring Arkansas and Louisiana. Arkansas has an estimated bear population of 3,500, while Louisiana’s population is estimated at 300.

In addition to the Missouri study, graduate students have been studying black bears in Mississippi since 2009.
“There are no official estimates of the number of black bears in Mississippi,” Belant said. “However, in early 2011, graduate students identified six females with cubs.”

This, along with the recent increase in bear sightings, suggests the population in Mississippi is growing. Most bears are in the Delta region and the extreme southeastern portion of the state, Belant said.

“Improving our methods to estimate populations and understanding the bears’ use of habitat will further strengthen our ability to effectively manage black bears in Mississippi,” Belant said.
Rural Medical Program Attracts Young Scholars

By Bonnie Coblentz

MSU freshman Mitchell McCloud took part in the Rural Medical Scholars program between his junior and senior years of high school.
When freshman Mitchell McCcloud walked onto campus at Mississippi State University Aug. 17, he already had two classes behind him and a clear idea of where his intended major could take him.

“Through the Rural Medical Scholars program, I was simultaneously introduced to Mississippi State University’s outstanding campus and the different aspects of the path to medical school,” McCcloud said.

McCcloud, 18, is studying chemical engineering at MSU. Between his junior and senior years of high school, the Silver Creek resident took part in the Rural Medical Scholars program offered through the MSU Extension Service.

“Rural Medical Scholars helped in my decision to become a Bulldog. My major, chemical engineering, is one that allows flexibility after graduation,” McCcloud said. “I can easily apply to medical school if I want to, or I can decide to continue on an engineer’s path.”

McCcloud said the program taught him to always work diligently to achieve superior results.

“Nothing else can prepare someone for college more than actually having the responsibility of living and studying on campus with a taste of college freedom,” he said.

Bonnie Carew is the Extension Service rural health program leader who coordinates Rural Medical Scholars. Each year, 20 academically gifted, rising high school seniors are accepted into the five-week program.

“We are trying to encourage these bright students to truly look at the field of medicine,” Carew said. “Two really big needs in the state are for physicians in rural areas and for primary or family care physicians.”

Participating students live at MSU in residence halls and take biology and precalculus. They earn seven college credit hours, visit the University of Mississippi Medical Center in Jackson and shadow area physicians in their practices. Students pay only for their food.

“The experience gives them invaluable input as they make decisions about their future career paths,” Carew said.

The program has a simple purpose: to try to create more physicians for the state.

“Mississippi has the second-lowest number of physicians per capita in the nation,” Carew said. “Almost half of all Mississippians do not have access to a primary-care physician, and 56 percent of the state’s primary-care physicians practice in only four counties.”

To address this need, the Rural Medical Scholars program selects talented and interested high school students and exposes them to college academics and experiences relevant to the life of a family medicine physician.

“They get to see the need for primary physicians, particularly those in family medicine,” Carew said. “Our numbers show that we’re doing pretty well at encouraging these young people to consider careers in medicine in Mississippi.”

Josh Roark was a member of the Rural Medical Scholars Class of 2002. After graduation from MSU with an engineering degree, he went to work for the National Institutes of Health before applying to medical school. He is now in his second year of medical school.

“I participated in Rural Medical Scholars because I was a pretty motivated student in high school and medicine was one of my interests,” Roark said. “I can definitely say it wasn’t my only interest, but it helped me see what medicine was like. For someone who didn’t have access to the medical field through any family or friends, this was invaluable.”

As of this summer, 276 students have gone through the Rural Medical Scholars program. This summer’s graduates are still in high school, but of those who have completed high school, about 72 percent are headed toward health-related careers. Since the program began in 1998, 24 scholars have gone to medical school and 15 are practicing physicians, 10 of them in Mississippi.

While it is academically challenging, it is also fun.

“I really enjoyed meeting new people from different walks of life and learning from them,” McCcloud said. “The only difficult aspect of Rural Medical Scholars is the biology class. I had never studied as much in my life, but I worked hard and earned an A in the course.”

Funding for the program comes from the Mississippi Institute for the Improvement of Geographic and Minority Health at the University of Mississippi Medical Center and the State Office of Rural Health at the Mississippi Department of Health. The program ran from 1998 to 2007 and then was reinstated in 2010 when funding was renewed.
CVM Students, Faculty Gain International Experiences

By Karen Templeton

At the Mississippi State University College of Veterinary Medicine, students and faculty are expanding their leadership experiences as they learn, volunteer and teach around the world. Their enthusiasm and sense of adventure have led them to explore new programs for CVM students and faculty to travel abroad and host international peers as they participate in global veterinary medicine.

Jessica Platz, fourth-year CVM student from Long Beach, caught the travel bug early in her educational career and has spent much of her time at CVM motivating other students to seek out interesting experiences abroad.

“I had an interest in travel and learning more about disease issues in other countries,” said Platz, who is working toward a DVM and master’s degree with a focus on veterinary public health. “With the help of my advisor, I found an opportunity in Brazil through the Global Health Alliance. I got to spend an entire summer there researching Chagas disease.”

Chagas disease is spread by insects and affects both humans and animals. In Brazil, Platz learned more about the disease and how the region is responding to it.

“The disease is now found in Texas, and there have been a few cases in Mississippi, Tennessee and Louisiana,” Platz said. “Understanding its spread can help us determine ways to mitigate its impact here in the United States.”

Platz’s research focuses on creating a detection model that monitors for the disease. Platz also helped start a group on campus to encourage other students to take advantage of study-abroad opportunities. With help from Dr. S.W. Jack, professor in the CVM Department of Pathobiology and Population Medicine, Platz started the college’s International Veterinary Student Association, or IVSA, chapter.

“The group offers support to those who want to study and volunteer abroad,” she said. “We’ve gotten great support from CVM faculty and the Dean’s Office. It has been incredibly helpful to have a network of students seeking and finding new avenues of study and research.”

Jack’s extensive experience in voluntary veterinary work enables him to identify with the students’ enthusiasm for travel and learning. His recent work through Christian Veterinary Missions in Mongolia has inspired similar trips.

“Groups of veterinarians travel there to share medical knowledge. We basically set up an Extension service teaching model,” Jack said. “In Mongolia, animal herds are a measure of wealth and are the main food sources for families. We instruct-ed herd owners and Mongolian veterinarians on Western veterinary medicine practices to help them improve and maintain herd health.”

The medical information and instruction Jack and other volunteers provide help improve the standard of living because the healthier the herds, the better the food supply.

“Veterinarians can do a lot of good in countries like Mongolia, but so can veterinary students,” Jack said. “Our veterinary students are so well-prepared, and they have more education under their belts than many practicing veterinarians in developing countries. What the students bring to these places is invaluable.”

One such student is Renee Blanco, a third-year CVM student from Florence, S.C. She spent six weeks volunteering in Mongolia this past summer. The first three weeks of her trip were spent at an animal clinic teaching Mongolian veterinarians about small animal care. Blanco used videos and other materials as part of her instruction. She also worked with small animals that were brought into the clinic.

“In Mongolia, there are very few small animals, or companion pets. So, many clinicians have not had much experience with them,” Blanco said. “I went over everything from dental work.”

The next part of Blanco’s trip was supposed to be dedicated to working with animal herds in the countryside, but there was an urgent need for volunteers to teach English to young children. Blanco did not hesitate to change her course and help out.

“You have to learn to be flexible in these situations,” she said. “I had never taught English, so it was a good experience. The best part was learning more about Mongolian culture.”

During her time teaching children, Blanco did get some opportunities to observe large animal surgeries.

“It was interesting to see how the veterinarians there did so much with so little,” she said. “Here, we have access to the best instruments and medications, but the Mongolian veterinarians just make it work with what is readily available to them. I learned never to underestimate what is at my disposal and to make the best of what I have.”

Blanco is back at CVM and busy with her studies, but she thinks about her time in Mongolia and looks forward to her next trip there.

“I definitely want to go back,” she said. “I worked with amazing people and know there is still a lot for me to learn there.”
CVM student Rebecca Willcutt worked long hours in hot temperatures to provide much needed services to pets in Central American communities.

CVM students (from left) Luc Vallone, Rebecca Willcutt, Ashley Gerrard and Jessica Platz gained hands-on experience managing surgery recovery, deworming animals and practicing suturing techniques while volunteering in Central America.
Fourth-year CVM student Jessica Platz has traveled abroad twice during her time in veterinary school. Part of her trip to Costa Rica and Panama was focused on managing small animal surgery recovery.

CVM professor Dr. Carla Houston (left) accompanied students Ashley Gerrard, Rebecca Willcutt, Luc Vallone and Jessica Platz on their trip to Central America. She assisted the students and learned how other countries conduct international student experiences.

Third-year CVM student Renee Blanco had the opportunity to observe large animal care and surgeries during her time volunteering in Mongolia.
IVSA’s current president, second-year CVM student Rebecca Willcutt from Schulenburg, Texas, also volunteered abroad during her time off from classes. Willcutt and a group of other CVM students participated in a Volunteers for Intercultural and Definitive Adventures, or VIDA, veterinary mission trip. VIDA partners with volunteers to provide basic veterinary care, owner education, and free spay and neuter surgeries to pets and livestock in remote and isolated communities. The CVM VIDA group volunteered in Panama and Costa Rica.

While there, like Blanco, Willcutt and her fellow students learned to make the best use of limited resources.

“The working conditions were very different than what we were used to in the United States,” Willcutt said. “We made do with what we had and worked to make sure everything was as sterile as possible.”

The students worked in free clinics set up in community centers and schools. They worked long hours in hot temperatures to provide much needed services to community members.

“Central American veterinarians took time away from their own practices to train and supervise us, and also provide volunteer services,” Willcutt said. “We all learned a great deal and were thankful to get the opportunity to get started with spay and neuter surgeries.”

The students managed surgery recovery, dewormed animals and practiced suturing techniques. They learned these procedures from trained veterinarians and then practiced them under supervision.

“In addition to the medical volunteer work, we brought over and distributed supplies, such as leashes and collars,” Willcutt said. “It was a real eye-opener to see the differences in pet care between our countries. We all came back learning not to take things for granted and to really appreciate our educational opportunities.”

Dr. Carla Huston, associate professor in the CVM Department of Pathobiology and Population Medicine, accompanied the group of students to Costa Rica and Panama.

“My role was to observe our students at work and learn how other countries view and conduct international student experiences,” Huston said. “There has been a real interest among students in international study, and faculty members want to get involved and find ways they can assist.”

Huston said the students received instruction on preventative care for animals and techniques such as suturing and spay and neuter surgeries. Veterinarians and veterinary technicians supervised all procedures.

“It is great to see students taking such an initiative in getting educational opportunities in other countries,” she said. “I’m glad I got to see firsthand what types of experiences they are interested in and are actually getting.”

Huston said CVM is collaborating with universities in other countries to develop an educational exchange program for both students and faculty.

“The curriculum would go beyond learning about preventative pet care and surgical techniques,” Huston said. “The students could gain a better understanding of global animal agriculture and food safety. They would be collaborating with educational institutions in countries facing famine, drought and other conditions that make raising animals for food difficult.”

Students from international veterinary colleges would also have the opportunity to study at CVM.

“It is about idea sharing and working together on large-scale issues that affect the entire globe. Interested faculty could also take advantage of the opportunity to conduct research in other countries and share ideas,” she said. “Right now, there is work being done to establish those partnerships at two veterinary colleges in Costa Rica, one in Mongolia and one in Australia.”

Dr. S.W. Jack and several other CVM faculty members are working on establishing a global veterinary services certificate for CVM students.

“Really, it’s the students who have taken the initiative in becoming a part of what’s going on around the world in veterinary medicine. The faculty are following their lead and becoming more involved,” Jack said. “Earning the certificate would require taking five courses in global animal and public health issues.”

In addition to small-animal clinical experiences, international travel offers opportunities to learn about exotic and large animals in other countries. Second-year student Caitlin Allori from Chicago said her studies through the Institute for Sustainable International Studies in Belize have added to her knowledge about animal conservation and large animal care.

Allori spent the first two weeks of the program learning about exotic animal care and conservation.

“There was lecture paired with hands-on experiences at sanctuaries, zoos and a parrot rescue facility,” Allori said. “We gave iguanas baths and prepared them for release and did physical exams on parrots. I really enjoyed learning about exotic animals.”

Allori spent the last part of her session working with large animals.

“The large animal portion was hands-on, and I enjoyed it more than I thought I would,” said Allori, who is secretary for CVM’s IVSA chapter. “I went to Belize with a focus on exotics and ended up really loving the large animal medicine also.”

After getting instruction from trained veterinarians, Allori performed basic medical procedures such as filing horse teeth and deworming cattle, sheep and goats.

“I noticed that they do not have access to as many types of medicines as we do here,” Allori said. “It was interesting to see how the veterinarians there approach wildlife and large animal health. I wouldn’t trade the experience.”

After her studies in Belize, Allori is working to involve other students in study-abroad programs and research other international externships.

“I definitely want to do more traveling and to learn more abroad,” she said. “It was nice to be a part of helping a community, but really, I feel like I gained the most.”

Professors are taking the initiative to invite international students to CVM to expand educational opportunities. Dr.
Camillo Bulla, assistant professor of pathobiology and population medicine, studied veterinary medicine in his home country of Brazil. Since joining CVM, he has worked to develop an externship program for Brazilian students so they can spend some of their last year at CVM. The program is also intended for residents and graduate students.

“The time here at CVM provides Brazilian students with a new perspective; it consists of a lot of active learning,” Bulla said. “In turn, CVM gets additional access to some bright students who have a lot to offer. We’ve recently had a student here who was first in her DVM class in Brazil.”

Bulla is looking to expand the program and to recruit new students and faculty from Brazil.

“I want to show them what CVM has to offer. Coming to study here is a great way to broaden perspectives,” he said. “But also, I want our CVM students to take advantage of the opportunity to learn in Brazil. A reciprocal relationship in which students can gain experiences at CVM and Brazilian veterinary colleges is what I am aiming to develop.”

Through their many initiatives, CVM students and faculty are committed to service, research and volunteerism.

“Veterinarians all around the world are working in difficult economic situations and within certain cultural mindsets,” Willcutt said after her travels to Central America. “The opportunities we are getting from our travels abroad are opening our eyes to this and showing us we can be a real part of improving global veterinary care.”

The CVM students who traveled abroad received funding from the Pegasus Partners Endowed Fund, which is supported by alumni and friends, and CVM’s international veterinary medicine humanitarian endowment, established by former CVM dean John Tompson and his wife Kay.
CVM student Renee Blanco spent some of her time in Mongolia in the countryside, teaching English and learning about large animal medicine.
Mind-boggling population numbers make the introduced “hairy crazy ant” a big, hairy problem in Mississippi.

The ant, known scientifically as *Nylanderia pubens*, was first detected in Mississippi in 2009, but the earliest U.S. record is from Florida in 1953. It was not reported as a serious nuisance in Florida until 1990. It was detected in Houston, Texas, in 2002, where populations quickly spread to at least 18 counties.

The ant is thought to have come from Argentina or Brazil originally and is now found in Hancock and Jackson counties in Mississippi.

“This type of ant is an invasive species that makes huge, super colonies that can cover large areas of land,” said Joe MacGown, a research technician.
and scientific illustrator for the Mississippi Agricultural and Forestry Experiment Station. “They nest just below the soil surface, under logs or in natural or man-made cavities, such as walls or attics.”

These tiny, orangish-brown ants are best identified by the way they run around very quickly and sporadically. Hairy crazy ants do not pose a medical threat to humans, as they do not sting, and their bites are insignificant.

“They can nest anywhere and can have large quantities of queens and hundreds of millions of worker ants living in one colony,” MacGown said. “When they have infested an area, your feet are covered with them within a second or two of contact with the ground.”

They cause problems because they have no natural enemies and displace native species, disrupting the natural ecosystem.

Richard Brown, director of the Mississippi Entomological Museum at Mississippi State University, said invasive species, also called exotic species, are estimated to have cost the country about $120 billion.

“The problem with hairy crazy ants, as with all invasive species, is that they have no natural predators or parasites, and there is nothing that contains their numbers,” Brown said. “They compete with native species, and they have an adverse impact on natural habitats.”

To date, the hairy crazy ants have been detected near bayous in Waveland in Hancock County and in Ocean Springs in Jackson County. These species usually nest outdoors but also infest homes, businesses and other structures. They appear to be attracted to electrical equipment, where large numbers of worker ants cause short circuits.

“Because of their numbers, you won’t be able to control them yourself,” MacGown said. “When there is a new infestation, pest control operators often have to come in weekly to begin to control this ant. It would be ideal if all the houses in the area could be treated simultaneously.”

The fact that they defy do-it-yourself control treatments actually led to their discovery.

“A few years ago, we started sending vials to pest control companies on the coast, asking them for samples of the most common ants they are dealing with,” MacGown said. “When we got the sample of the hairy crazy ant, Blake Layton, an MSU Extension entomologist, and I immediately went to the coast and confirmed it.”

A major role of the Mississippi Entomological Museum is to identify unknown insect species. Brown said the museum has been able to detect many exotic species because of its involvement with the Cooperative Agriculture Pest Survey, funded through the U.S. Department of Agriculture’s Animal and Plant Health Inspection Service. The museum also cooperates with the Mississippi Bureau of Plant Industry and MSU research and Extension Service faculty.

In addition to identifying insects submitted to the museum, the staff conducts basic insect research and numerous insect-gathering trips. One annual trip is the William H. Cross Expedition, a weeklong collecting trip funded by an endowment in the MSU Development Foundation that honors the founder of the Mississippi Entomological Museum.

“We are one of the most active museums in the country in field work,” Brown said. “Somebody on our staff is in the field every week collecting new samples. We’re actively involved in research and systematics of insects, such as describing new species and determining the classification and taxonomy of new species.

“We are heavily involved in basic research, which doesn’t solve an immediate problem but provides the foundation of knowledge so when we do find a new pest, we have a way to associate that pest with its relatives,” Brown said.

Although aggressive efforts are in place to monitor the introduction of nonnative insect species to the United States, states with a coastline and international ports have a difficult task.

“There are 28 introduced ant species in Mississippi, and we find new exotic species every year,” MacGown said. “Florida has more than 60 introduced ant species because there are so many ports of entry to the state.”
MSU RESEARCHES
Poultry Health, Growth
Mississippi State University researchers are investigating ways to improve the nutrition and growth of the state’s most profitable bird.

Poultry is consistently Mississippi’s No. 1 agricultural commodity, and MSU supports the industry with a number of research projects. One of the current projects is helping determine ways to increase the hatchability and health of broilers. Injecting eggs, also known as in-ovo injection, is used to vaccinate poultry for diseases, but MSU researchers are finding a new way to use the procedure.

“Chicken embryos are made up of water, protein and fat. To get the energy they need to hatch, they have to convert that protein and fat into carbohydrates,” said Wei Zhai, assistant Extension professor in MSU’s Department of Poultry Science. “So that the hatchlings can reserve their fat and protein for needed growth, we are injecting eggs with carbohydrates before they hatch.”

To inject the eggs, Zhai uses a commercial multi-egg injector machine. Intelliject donated the machine to MSU in 2007. Mississippi State is the only academic institution in North America to own the injector. The system provides uniform delivery, ensuring that the same volume and concentration of vaccines or nutrients are provided to each egg.

“We are injecting the eggs just like anyone in the industry would, so we are seeing the practicality of the research,” Zhai said. “Without the machine, the work would be time-consuming and difficult. Its use also requires less labor, saving the growers and producers money.”

Thus far, the research indicates that in-ovo injection of carbohydrates can provide benefits to commercially grown poultry.

“We are seeing an earlier increase in body weight and good hatching,” Zhai said. “We want to continue looking at different volumes and concentrations of carbohydrates so that we get the most efficient injection amount.”

David Peebles, interim head of the poultry science department and Mississippi Agricultural and Forestry Experiment Station researcher, said the industry is looking forward to using this new procedure.

“Vaccine injections have been used for many years and have proven useful,” Peebles said. “Using the same process to provide chicks with an earlier boost provides a lot of potential for the industry.”

Peebles and Zhai are not limiting their in-ovo work to carbohydrates; they are also researching the potential of vitamin supplements.

“A pound of highly purified vitamin D product can cost up to approximately $20,000. So, it may be very costly to add efficacious amounts of vitamins like this to broiler diets,” Peebles said. “In-ovo injection may be useful in providing birds with an early supply of nutrients, such as vitamin D to help with bone growth.”

Providing nutrients and vaccinations in ovo not only can provide benefits to the industry, but also can help reduce birds’ stress, as they do not have to be handled to get injections after hatching.

“We want to continue to look at ways to make this procedure easy to use and helpful,” Zhai said.
Mississippi
Flavors Win
Regional
Competition

By Keri Lewis

The Jackson County 4-H team of chefs from St. Martin High School (from left), Cory Martin, Sarah Soares, Adriana Wilson and Jarod Harris, were named grand champions of the first Southern Regional 4-H Seafood Cook-Off, held in conjunction with the Great American Seafood Cook-Off in New Orleans.

Young chefs put a Mississippi twist on a brunch favorite to create the winning entry in the first-ever Southern Regional 4-H Seafood Cook-Off, held in New Orleans.

Adriana Wilson, Sarah Soares, Cory Martin and Jarod Harris, seniors in the hospitality and tourism management program at St. Martin High School, prepared their Mississippi-Style Crabmeat Benedictine once a week throughout the summer to prepare for the competition, which is part of the Great American Seafood Cook-Off.

Evelyn DeAngelo, Jackson County 4-H agent with the Mississippi State University Extension Service, recruited the St. Martin students to give them a unique experience that involved their interest in the culinary arts.

“They developed their recipes in May and practiced every Wednesday this summer,” DeAngelo said, “Each team member learned how to prepare every aspect of the dish just in case there was a last-minute emergency.”

Instead of the usual English muffin, the team substituted a pan-fried cheddar biscuit to give the dish a little crunch. They topped the biscuit with a poached egg, Hollandaise sauce spiced with cayenne pepper and Dijon mustard, and sautéed Mississippi Gulf Coast blue crab. A side of marinated asparagus gave color to the plate, which was garnished with diced Roma tomatoes and paprika. Finally, a chilled watermelon salad with mojito syrup and a fresh mint garnish served in a sugar-rimmed porcelain salad dish offered a sweet Southern taste to the judges, who were impressed.

The cook-off required the team to prepare their dish in 60 minutes in front of an audience and with videographers looming over their shoulders. Sarah Soares said it was nerve-wracking to have the video cameras in her face.

“But after a while, you forget that they’re there and just focus on your cooking,” she said.

The team prepared five plates, four for the judges and one for the media. Then the team stood before the panel of judges. Each team member introduced the component he or she had prepared and explained the impact of the ingredients on Mississippi’s economy. They also discussed how they handled food safety in the kitchen and the dish’s nutritional value.

“Fabulous! Your professionalism was evident,” one judge commented. “Presentation on the plate was gorgeous. Your verbal team presentation was also very well done, and you were confident.”

Other judges praised the team’s personality, creativity and culinary imagination. Two of the judges gave the Mississippi team perfect scores in all three areas: dish presentation, creativity and flavor. The Jackson County 4-H’ers were the only team from Mississippi, and they competed against teams from Louisiana, Arkansas and South Carolina.

The team was positive their dedication would pay off.

“We worked hard on perfecting our dish all summer, making changes to fit the southern Mississippi style,” said Cory Martin.

Jarod Harris, who compared the competition to the popular Food Network show “Iron Chef” and its famous Kitchen Stadium, focused on the taste of their winning brunch treat.

“How can you not love something with 4 ounces of crabmeat on it?” he asked.

The experience has strengthened the resolve of each team member to continue the pursuit of culinary perfection both in next year’s competition and beyond.

“We will have to return next year and compete as reigning champs,” said Adriana Wilson, whose experience in the competition confirmed her dream to own a restaurant someday.

“I’m expecting some more brainstorming and practices to come out of ‘the dream team’ soon.”
The Windsor plantation was built during 1859–61. The original owner, Smith Daniell II, only lived in the mansion for a few weeks before he died. It is said that Mark Twain stood musing in a rooftop observatory while overlooking the Mississippi River. After the Civil War, Windsor burned during a house party. The wrought-iron staircase is now a part of nearby Alcorn State University. Windsor Ruins has appeared in several feature films, including “Raintree County” and more recently, “Ghosts of Mississippi”.

Claiborne County has a rich history with agriculture at its core. But it also is home to the most modern technology found anywhere in the nation with the Grand Gulf Nuclear Power Plant. And with its 486 square miles of fertile land nestled against the Mississippi River and the Big Black River, Claiborne County is endowed with a natural bounty that attracts hunters and fisherman from all across the country. These characteristics make working in Claiborne County both challenging and very satisfying.”

Cliff Covington, Extension County Director
Hopper Selected for Expanded Role

The dean of Mississippi State University’s College of Forest Resources and director of the Forest and Wildlife Research Center will take on an expanded leadership role.

George M. Hopper now also serves as the dean of the College of Agriculture and Life Sciences (CALS) and director of the Mississippi Agricultural and Forestry Experiment Station (MAFES).

Hopper has served as interim CALS dean and interim MAFES director since the administration of the four units was merged last July. A faculty-led Select Committee on Efficiencies and Innovations recommended merging the two colleges, but MSU administrators decided to retain the colleges and merge only their administration.

Gregory Bohach, vice president of the Division of Agriculture, Forestry and Veterinary Medicine, and Jerry Gilbert, MSU provost and executive vice president, announced Hopper’s appointment.

“Forestry and agriculture are the largest and most important industries in our state’s economy, accounting for about one-third of all jobs in the state and nearly 25 percent of all income,” Bohach said. “We are fortunate to have someone with Dr. Hopper’s broad educational background and professional experience to lead these four units within the Division of Agriculture, Forestry and Veterinary Medicine.”

Hopper has served as dean of MSU’s College of Forest Resources for six years. Before becoming dean, he spent 11 years as head of the Department of Forestry, Wildlife and Fisheries at the University of Tennessee in Knoxville.

“MSU has many challenges and opportunities in its future, and we are going to need proven leadership to address them,” Gilbert said. “Dr. Hopper has successfully led the four units, and we are confident in his ability to continue addressing the evolving missions of these programs.”

In addition to earning bachelor’s and master’s degrees from MSU, Hopper holds a doctorate from Virginia Polytechnic Institute and State University. A Vicksburg native, Hopper is a Society of American Foresters Fellow and a past president of the National Association of University Forest Resources Programs.

MSU Professor Wins Third Fulbright Honor

Only 800 Fulbright U.S. Scholar Fellowships are awarded each year, but MSU’s Phyllis Miller has been awarded a Fulbright fellowship for the third time in her career.

Miller, a professor in apparel, textiles and merchandising in the MSU School of Human Sciences, has received a lecturing and research appointment with the College of Engineering at the University of Mauritius. The university, located in the Republic of Mauritius, an island off Africa’s southeast coast, is establishing a new college of fashion.

The research component of Miller’s work will document the culture’s use of colors, symbols and styles of dress. She will study museum collections to gather information, including color samples, from historical garments. She will classify the color data according to international databases.

“The Fulbright program is an international honor deserved by Dr. Miller,” said Michael Newman, director of the School of Human Sciences. “She will be able to share experiences and information that will make our students more competitive in the global marketplace.”

In 2005, Miller received a Fulbright lecturing and research fellowship to teach textile design courses and to develop the prototype for a database of costumes at the National Academy of Arts in Sofia, Bulgaria. In 2006, she received a Fulbright-Hays fellowship to participate in the Fabric of Indian Life Study tour. She received the MSU Faculty Diversity Award in 2010. Her textile and apparel designs have been selected for numerous prestigious juried exhibitions and have won both critical and popular awards.

MSU’s Deeds Recognized by National Association

Jacquelyn Deeds, agricultural information and education professor at Mississippi State University, was elected senior fellow of the American Association of Agricultural Education (AAAE) at the organization’s recent annual meeting.
AAAE is dedicated to promoting the teaching and learning of agriculture. Becoming a senior fellow is the highest level of achievement within the organization.

Deeds has taught undergraduate and graduate classes in MSU’s College of Agriculture and Life Sciences since 1985. She coordinates the graduate program and supervises student teaching and field experiences.

“Dr. Deeds has been a trail blazer and a role model in the agricultural education profession,” said Walter Taylor, associate dean of MSU’s College of Agriculture and Life Sciences. “She has distinguished herself in the department, the college, and the university because of her zeal for agricultural education, teacher education, and the role of women in agriculture.”

A native of Oregon, Deeds was the first woman to teach high school agriculture in her home state, and she became the first female president of the Oregon Vocational Agriculture Teachers Association. Deeds also served as the first female officer and president of the AAAE.

Deeds received her bachelor’s and master’s of science from Oregon State University. She earned her doctorate at The Ohio State University before beginning her teaching career at MSU. Deeds has held many positions within professional organizations, including being named to the National FFA board of directors.

**Jacquelyn Deeds**

An MSU Extension associate will be supporting Mississippi landowners and fisheries resources.

Bill Maily began his new duties as an Extension associate in the MSU Department of Wildlife, Fisheries and Aquaculture on Aug. 1 and will work from the Central Mississippi Research and Extension Center in Raymond. Before joining the department, Maily was an area Extension agent in the Hinds County Extension Office.

“Bill will work with landowners to address their farm pond management needs,” said Bruce Leopold, head of wildlife, fisheries and aquaculture. “We are excited to have him providing this support to the central part of the state.”

A native of Ellisville, Maily received his bachelor’s degree in animal science and a master’s degree in agricultural education, both from Mississippi State.

**Bill Maily**

**Expert to Provide Fisheries Support**

An MSU Extension Service assistant professor will help the university and organizations around the state prepare for disaster situations.

Ryan Akers is a newly appointed assistant professor in the MSU School of Human Sciences and with the Center for Governmental Training and Technology. Akers will provide statewide leadership in the development and implementation of Extension emergency management programming. The curriculums will be of use to emergency managers, communicators, first responders and those involved with food safety and agricultural security.

“Dr. Akers’ background working with emergency management officials at all levels of government has given him the experience to take on this new role,” said Sumner Davis, interim leader of the MSU Center for Governmental Training and Technology. “He will be a vital part of increasing the educational opportunities for those charged with safeguarding the people of Mississippi.”

Akers earned his bachelor’s degree from Delta State University and a master’s degree from MSU. He earned his doctorate in student affairs administration from the University of Georgia.
As Angie Rogers anticipates a May 2012 graduation, she looks back on her MSU experience with pride. She believes that upon receiving her degree, she will possess the educational background to pursue her goal of benefiting agriculture in her home state of Mississippi.

A senior agribusiness major, Rogers transferred to MSU from Mississippi Gulf Coast Community College. However, she feels as if she spent her entire college career at Mississippi State.

“I’ve been blessed to attend an agriculture school with such an outstanding reputation, and I’m incredibly fortunate to do so with the help of scholarships,” Rogers said. “Without the generosity of donors, I wouldn’t be able to pursue my love of agriculture or be able to hopefully impact the industry when I graduate.”

Rogers is the recipient of the Zona Dale Taylor StatePride Scholarship in the College of Agriculture and Life Sciences, funded by Taylor and her husband, Charles, an MSU graduate. Taylor was a member of the founding editorial staff of Southern Living magazine and an assistant professor in the Department of Home Economics at Mississippi State.

“I’m a small town girl, having lived my entire life on my family’s cattle farm. I was always hands-on with the farm, which probably accounts for my desire to help farmers, like my dad,” Rogers said.

Rogers’ family owns a farm in Wiggins with about 250 head of cattle, and her dad is also a contractor.

“I have always loved math and enjoyed the farm and the business of agriculture, and I wanted to do my part in helping make it profitable,” she said.

Rogers’ future plans include putting the agribusiness degree she will earn to use as a consultant.

“I would like to own my own consulting business because I want to benefit agriculture in Mississippi. The continued success of agriculture in our state is very important to me,” she said.

Of her decision to attend MSU, Rogers said the university has exceeded her expectations.

“The experience has been great for me,” she said. “I love being here, and my agricultural economics teachers have made my learning experience both challenging and beneficial.”

The College of Agriculture and Life Sciences enrolls about 1,320 undergraduate and graduate students in 10 academic departments. Many of those students, like Rogers, are in need of scholarships to help them pursue their dreams.

MSU’s College of Forest Resources provides outstanding backgrounds for careers in forestry, resource analysis, wildlife conservation, Extension outreach, fisheries science and other professions.

Alan Coats chose MSU as his educational institution, coming from his hometown of College Station, Texas. Coats is a sophomore forestry major who is concentrating his studies in the area of environmental conservation.

Coats, a member of the Judy and Bobby Shackouls Honors College, is a recipient of the Mary Martin Childs Legacy Scholarship made possible by a gift from Mary Childs. Childs is a 1980 banking and finance graduate who serves as vice chairman of the board and chief operating officer for The Peoples Bank in Ripley. She and her husband, Cary, raise registered Angus and Polled Hereford, and commercial cattle. She chose to create the scholarship because she grew up in an MSU family and the university has been an integral part of her life.

Coats shares a Bulldog family legacy with his benefactor. His dad, William Alex Coats, and his grandfather, Robert Coats, are both MSU graduates. The elder Coats was a longtime MSU-MAFES employee.

Before enrolling at Mississippi State, Coats had been accepted into the honors programs at the University of Tennessee and Texas A&M. He chose MSU because of his family ties and the scholarship package, which was significantly larger than those offered by the other schools.

Since coming to MSU, Coats has continued to be impressed by the great sense of community at the university. He is very com-
fortable as a student and is thriving in his academic studies. “The MSU faculty take the time to get to know you as an individual and try to assist students in any way possible,” Coats said. “I have two younger brothers, and I would definitely encourage them to consider Mississippi State because of the atmosphere and all that it has to offer.”

Scholarships established through StatePride can often help alleviate the financial strains that college can place on a family. “Now that I don’t have to work or take out loans, I have the opportunity to concentrate on studying. I’m thankful for the generosity of MSU alumni and friends. No one has to give in support of MSU scholarships, but many choose to spend their money in a way that directly helps students like me,” Coats said.

The College of Veterinary Medicine

Students in the MSU College of Veterinary Medicine are benefiting from financial support from a Memphis, Tenn., couple. Walter W. Rotchild Jr. and his wife, Jean, are assisting preveterinary students and veterinary technology students through the StatePride initiative.

A contribution from them established the Rotchild Family College of Veterinary Medicine Loyalty Scholarship. Walter Rotchild is a 1948 MSU accounting graduate.

One recipient of the Rotchild scholarship is MSU freshman Jessica Cowley of Texas. Cowley is an animal and dairy sciences student enrolled through the veterinary college’s early-entry program. On this path, Cowley will complete her degree while beginning veterinary coursework.

“The college offers a program so that as a student I can complete two years of academic coursework and then two years of hands-on experiential learning opportunities,” she said. “This will prepare me for graduation and for work as a veterinarian since I will gain practical experience through my professional course of study.”

It is not surprising Cowley, who is an honors student at MSU, puts education at the forefront. She comes from a family of lifelong educators and was very particular in selecting a university to attend.

“My grandfather is a school superintendent, as is my Dad, and my mom is a high school counselor, so there are certain things I know to look for when considering colleges,” Cowley said. “I visited seven of the 28 veterinary colleges across the county, which included Texas A&M and Kansas State. Mississippi State was by far the most impressive to me.”

Cowley was further influenced by the amount of MSU scholarships she was eligible to receive.

“The scholarship package offered by MSU and the friendly atmosphere when I visited the campus made the decision even easier for me,” she said.

Cowley grew up raising Simmental and Angus crossbred cattle on her family-owned ranch. The ranch, J&J Land & Cattle Company, is located near Sulphur Springs, Texas.

“When I was a youngster, I showed goats and raised cattle and horses as 4-H projects. Now I’m involved with FFA and the MSU pre-vet club. Through these activities, I am continuing my lifelong love of animals, and I continue to learn how to provide them with the best care possible,” Cowley said.

Her experiences with the organizations gave Cowley a great foundation for pursuing veterinary care. She was recently selected to compete in the National FFA Agriscience Fair, where she will present her findings on certain 6 strains of Escherichia coli becoming resistant to antibiotics.

“From the time I was little, I wanted to become an animal doctor. My grandfather would always correct me and say, ‘veterinarian.’ However, I insisted on animal doctor,” Cowley said. “I carry the love for animals my grandfather instilled in me as I move toward realizing my dream of becoming the best animal doctor possible.”

Mississippi State’s veterinary college is the only one of its kind in the state of Mississippi. CVM awards a Doctor of Veterinary Medicine degree, a Bachelor of Science in Veterinary Medical Technology, and master’s and doctorate degrees in specialized areas.

Alumni and friends interested in contributing to scholarships and other areas of need in the Division of Agriculture, Forestry and Veterinary Medicine should contact a development director or visit www.msufoundation.com to learn about StatePride.

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It’s all in the name. Check it out for news and information from the Division of Agriculture, Forestry and Veterinary Medicine.