Table of Contents

On the Cover
On the Cover: The new rain garden at the Oktibbeha County Heritage Museum absorbs rainwater runoff while also adding more visual interest to the landscape. (Photo by Kat Lawrence)

Back Cover
Oktibbeha County 4-H Cloverbuds draw a mural with 3-D chalk on the outside of MSU’s Bost Building. The Cloverbuds, aged 5 to 8, attended the Cloverbud Caper Camp, sponsored by the MSU Extension Service. (Photo by Scott Corey)

4 Insuring Forests
An MSU study examines landowners’ willingness to pay for timber insurance.

6 History Makers
Two new historic landmark plaques honor the achievements of MSU faculty members J.O. Smith, Felix Edwards and W.B. Andrews.

7 Bug Hunt
Federal and state experts have teamed up with MSU to search for a small beetle that could cause damage to the state’s ash trees.

8 Sweet Crop
The two planting seasons needed to harvest one sweet potato crop make it a labor-intensive, high-cost crop to produce.

10 Smart Snacking
MSU is teaching families in low-income communities about healthy, low-cost foods so they can eat nutritious diets on a budget.

12 Helping Hands
MSU Extension Service provides assistance to victims of the April 2011 tornadoes.

14 Aspiring Veterinarians
The College of Veterinary Medicine’s first annual Vet Camp sparks youths’ interest in veterinary medicine.

16 Focus Section
MSU Extension Director Gary Jackson explains how the Extension Service is constantly evolving to meet the needs of people around the state.

22 Landscape Lessons
MSU’s Department of Landscape Architecture provides a new sustainable landscape design to a local museum.

24 Eagle Rescue
An injured bald eagle may fly again after three organizations worked together to save its life.

25 Quality Care
A Crawford child-care center becomes one of the most highly rated programs in the area.

26 Duck Calls
A former MSU graduate student helps hunters create a more accurate duck call.

27 County Profile
This issue profiles Lee County.

28 News Notes
Read the latest news from the Division of Agriculture, Forestry and Veterinary Medicine.

30 Boyd Scholarship
A new College of Agriculture and Life Sciences memorial scholarship honors Leroy H. Boyd’s dedication to quality education.
Vice President’s Letter

A good foundation is essential for any building because without a solid base, little of lasting value can be built. Judging by the age of Lee Hall, Montgomery Hall, the recently renovated Lloyd-Ricks-Watson Building, and other buildings at Mississippi State, these structures were built on solid foundations.

As an institution, the university’s mission is its foundation. There are 130 words in Mississippi State’s mission statement, but they can be summarized in the three words contained on the university’s seal: learning, service, research.

Classroom education is an important part of MSU’s mission, and our academic programs prepare students for careers that are in demand today and well into the future. That fact is especially true in the Division of Agriculture, Forestry and Veterinary Medicine (DAFVM), where students gain access to a wide array of opportunities, such as earning a veterinary medicine degree, preparing for medical school through undergraduate work in biological engineering, and learning to operate a florist shop or manage thousands of acres of forestland.

At MSU, however, learning goes on well beyond the walls of our venerable buildings. In DAFVM, young people from elementary through high school age participate in summer camps that introduce them to topics ranging from the world of insects to robotics. These camps are fun learning experiences for all participants, and they help determine career paths for some. For example, veterinary student Tori Hall made her career decision at age 13 after attending a veterinary medicine camp. She was among the MSU College of Veterinary Medicine (CVM) students who helped plan Mississippi State’s first CVM camp this summer. You can read about the camp on page 14.

Also in this issue of Landmarks is MSU Extension Service Director Gary Jackson’s report on the varied ways Extension delivers university-based information to virtually every segment of the Mississippi population. Adapting publications and other materials for use on smart phones and other rapidly changing electronic media is an important part of today’s Extension work. However, technology is combined with Extension’s human workforce in every county to give the university a personal presence within easy reach of every Mississippian.

Service to the state also strengthens our foundation. University expertise and training are especially important when emergencies threaten communities. When tornadoes and flooding hit much of the state earlier this year, Mississippi State’s wide-ranging response included aid from faculty and students in the MSU Extension Service, Mississippi Agricultural and Forestry Experiment Station, College of Agriculture and Life Sciences, College of Forest Resources, College of Veterinary Medicine, and Forest and Wildlife Research Center.

Research is the other element that puts MSU on a solid foundation. In fact, the university is ranked sixth nationally in agricultural research expenditures. Those dollars help our scientists conduct research to improve animal health care, keep our food supply the safest in the world, make crops more productive and profitable for our farmers, develop new products from crops and natural resources, and provide a host of other benefits to our state and nation.

As we head into a new school year, harvest season on our farms and hopefully cooler weather, I would like to thank all DAFVM employees for their hard work and dedication and our clientele throughout the state for their support and guidance in helping us respond to Mississippi’s ever-changing needs. It’s our people, those we work with and for, that are the real strength of our foundation.

Gregory A. Bohach
The tornadoes that ripped through Mississippi this April damaged about 74,000 acres of forestland in 22 counties, racking up timber losses of more than $30 million. Most of that timber was uninsured, but the results of a survey conducted by Mississippi State University may help change that trend.

Steve Bullard was one of those uninsured. He owns 100 acres of timber in Webster County — 40 acres of 26-year-old plantation pine and 60 acres of mixed pine and hardwood.

“I consider my timber a complete loss,” Bullard said. “Once a tornado wipes a path through forestland, the timber is of little value, no matter the size, particularly after several weeks have gone by since the damage.”

The twisting of a tornado separates the rings of a tree, causing damage that may not be immediately apparent. The timber may look good, but it will split and separate at the rings once cut into boards and dried.

“It has been really difficult to salvage timber on our property,” Bullard said. “We have had several logging firms look at the timber, and we have been able to salvage some chip-n-saw timber. However, at this point, we just want someone to clear the land so we can replant.”

Bullard’s only other financial recourse is to file a casualty loss on his taxes.

“I can deduct the damaged timber as a casualty loss. However, the specific requirements on calculating the loss may result in low or no deduction,” Bullard said.
Timber insurance in case of natural disaster is available, but like Bullard, most Mississippi landowners do not purchase it. A study recently conducted by the Mississippi State University Forest and Wildlife Research Center looked at the reasons behind that tendency.

About 2,000 landowners with more than 100 acres in the state were asked how much they were willing to pay for standing timber insurance, given a 3 percent deductible. On average, respondents were willing to pay between $2.38 and $3.59 per $1,000 for standing timber insurance, which is much less than the premium rate of $6 per $1,000 currently available.

"While the majority of landowners are willing to pay for insurance, what they consider a fair price differs from the premium set by insurance companies," said Ian Munn, MSU forestry professor.

This partially explains the under-insurance phenomenon for natural disaster risks among landowners.

"From the insurance companies’ perspective, there is very little information about what premium rates are affordable and attractive to landowners," Munn said. "Very few insurance companies currently offer standing timber insurance. Without knowing how much individuals are willing to pay for coverage, insurance companies may find it difficult to set attractive premiums."

Munn said there is a good market for timber insurance in Mississippi.

"Despite the fact that the current premium rate is well above the willingness to pay, the market for standing timber insurance is still attractive," Munn said. "Considering that in Mississippi there are more than 25,000 landowners with properties larger than 100 acres, even if a small proportion of landowners are willing to pay the required premium rates, there would be a substantial market for standing timber insurance in the United States."

The study also uncovered how landowner characteristics impact insurance demand.

"Without this information, insurers are unable to judge which landowners are likely to purchase standing timber insurance and target their insurance products accordingly," Munn said.

"As expected, the more risky that landowners perceived forestry investments to be, the more willing they were to pay for timber insurance," Munn said. "Those whose primary objective was to generate revenue from their timber were also willing to pay a higher premium."

Landowners with many years of management experience were less willing to pay for insurance.

"The most unexpected outcome of the survey was that suffering a loss from a natural disaster did not make landowners more or less likely to purchase standing timber insurance," Munn said.

Other factors that did not impact an individual’s willingness to pay for timber insurance included ownership size, age and region of the state.
Researchers and inventors often succeed with efforts others consider impossible, but one “crazy” idea in the 1930s and 1940s changed the face of agriculture and contributed to the formation of Mississippi’s first Fortune 500 company.

In April, the American Society of Agricultural and Biological Engineers unveiled an historic landmark plaque in Mississippi State University’s Agricultural and Biological Engineering Building. An identical plaque was unveiled May 27 at the MSU Delta Research and Extension Center in Stoneville.

These plaques honor the achievements of MSU faculty members and Mississippi Agricultural and Forestry Experiment Station researchers J.O. Smith, Felix Edwards and W.B. Andrews, all deceased. The three were instrumental in the development of anhydrous ammonia application technology, which gave birth to Mississippi Chemical Corp.

“When they wanted to put a gas in the soil for fertilizer, people thought they were crazy,” said Jac Varco, MSU professor in plant and soil sciences. “But almost 80 years later, anhydrous ammonia is still in use as a fertilizer.”

The plaques are the 56th markers placed around the country by the engineering society. Other markers commemorate milestones and inventions, such as the McCormick reaper, the John Deere plow, the New Holland hay baler and Eli Whitney’s cotton gin. Mississippi hosts another marker for agricultural aviation in Jackson.

Herb Willcutt, recently retired agricultural engineer with the MSU Extension Service, said Mississippi State faculty members began the long and detailed recognition application process three years ago.

“We felt like the efforts by these two agricultural engineers and one agronomist resulted in benefits to society and to the profession,” Willcutt said. “Their research was not just about finding a cheap source of nitrogen fertilizer for crops, but also about finding safe ways to transport, store and apply the material.”

The plaques commemorate work begun in 1932 when Smith, an agricultural engineer at the Delta Branch Experiment Station in Stoneville, initiated the research. He attached a small anhydrous ammonia cylinder to a mule-drawn plow to release the material into the soil. This was the first known use of anhydrous ammonia as a soil-applied crop fertilizer. The crude apparatus and the anhydrous ammonia it applied provided a much-needed source of nitrogen for the otherwise rich alluvial soils of the Mississippi Delta.

In 1943, agricultural engineer Edwards and agronomist Andrews renewed application research. Their efforts led to the development of the anhydrous ammonia fertilizer industry, which peaked in the 1960s and continues today.

“Their work established safe application techniques and equipment,” Willcutt said. “It has resulted, through economical fertilization, in improved yield and quality of food and fiber crops throughout the world. Anhydrous ammonia remains a leading source of nitrogen for crops in the United States.”

At http://www.asabe.org/awards/, find a list of historic sites designated by the American Society of Agricultural and Biological Engineers.
Federal and state experts have teamed up with Mississippi State University to search for a small beetle that could mean big trouble for Mississippi.

According the U.S. Department of Agriculture Animal and Plant Health Inspection Service, the emerald ash borer, or EAB, is responsible for the death or decline of tens of millions of ash trees in 15 states. The EAB is metallic green and about ½ inch long. EAB larvae tunnel under bark and disrupt an ash’s absorption of food and water, eventually starving and killing the tree.

Native to Asia, these beetles arrived in the U.S. hidden in wood packing materials commonly used to ship consumer goods. The first official identification of EAB was in southeastern Michigan in 2002. Thus far, the pest has not been found in Mississippi.

“When EAB was detected just north of Knoxville, Tenn., we got concerned about its possible spread to Mississippi,” said Jeff Head, APHIS state plant health director for Mississippi. “We now have a program in place in the state to monitor for EAB.”

Along with the Mississippi Department of Agriculture and Commerce, APHIS officials have set EAB traps across the state.

“Between the two agencies, we’ve set about 210 traps,” Head said. “They are placed where there are large concentrations of ash trees, such as parks and campgrounds. The traps are purple and triangular and are hung in ash trees or secured to trunks.”

Quick detection of EAB is necessary so that eradication programs can begin before the bugs cause costly damage to the state’s ash trees. The Mississippi Entomological Museum at MSU is ready to identify the destructive beetles. In 2009, APHIS designated the museum as an Eastern Region Identification Center, and all suspect species are sent to experts there for assessment.

“Anything that seems out of the ordinary is sent to us, and we get it identified. We have the capability to screen for a whole list of destructive species quickly, including EAB. It takes us about one to two days to screen all the samples that we receive on a daily basis,” said Richard Brown, the museum’s director and a professor in the MSU Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology. “If we were to get a positive result, we’d follow a predetermined protocol to alert federal officials.”

Brown said EAB would have a significant impact on the state’s trees.

“If it were to make its way here, it would certainly affect the many ash trees we have here in Mississippi,” he said. “That’s why reporting any suspected cases is important.”

Head said public participation in EAB surveying is encouraged.

“We want people to be aware of the traps and to leave them in place. Also, we’d really like those with ash trees to contact us so that we can set traps on their properties,” Head said. “The Nature Conservancy is already helping us by conducting visual surveys, and we’d like to have more groups assist us.”

The public can help prevent the introduction of the EAB into Mississippi by restricting its movement. The most effective way to stop the spread of the EAB is to avoid moving firewood. EAB eggs and larvae remain in tunnels dug into infested trees. Adult beetles can emerge from cut wood and then move on to attack healthy trees.

“Humans move the EAB a lot faster than it can move itself, especially through the movement of firewood. People should make sure their wood is from local sources, and they need to burn it where they buy it,” Head said. “It is important not to carry it across state lines or out of any quarantine areas.”

Contact Head at (662) 323-1291 or jeffery.l.head@aphis.usda.gov to participate in EAB surveying or to report a potential EAB find.
By Bonnie Coblenz  
Photos by Scott Corey

It takes two planting seasons to harvest one sweet potato crop, making this delectable vegetable a labor-intensive, high-cost crop to produce.

By late March, Mississippi sweet potato producers finish bedding the crop, which means they have planted the seed stock that will produce transplants, or slips. Benny Graves, executive director of the Mississippi Sweet Potato Council in Vardaman, explained how the sweet potatoes are bedded.

“Machinery conveys the potatoes from hoppers and lays them out in a 3-foot-wide stream of potatoes coming out of the machine,” Graves said.

The potatoes lay in a single layer on prepared soil that is fertilized and moist, and a second machine comes behind and throws 1 to 2 inches of soil on top. Producers then cover the beds tightly with black plastic and punch a few holes to allow the potatoes to breathe.

“This creates long, narrow beds that may be up to a quarter of a mile long,” Graves said. “Rows are placed about 8 feet apart, allowing enough room to get the machinery through the fields. Then we wait and hope for sunshine and warm temperatures.”

The plastic sheets come off when the plants begin to emerge from the soil. In six weeks, the plants will be about 10 to 12 inches tall, which is when they are cut for transplants.

“A special cutter bar cuts them even with the soil line and lays them over,” Graves said.

Crews scoop up the slips by hand and stack them in plastic milk crates for ease of handling. Each crate holds about 1,000 plants; it takes between 11,000 and 13,000 slips to plant an acre of sweet potatoes. About 80 acres of seedbeds are needed for every 1,000 acres a producer intends to plant.

“Growers typically hold these plants in milk crates 24 to 48 hours to let them initiate their own root system naturally,” Graves said. “Then they are taken to the field to transplant.”

Slips usually are cut beginning in early May, and fields are planted in transplants through June and sometimes into July.

Bill Burdine, an MSU Extension Service area agronomic crop specialist in Chickasaw County, said the hardy slips are transplanted with a mechanical planter. Workers feed a transplanting wheel one slip at a time, and the machine places one plant every 12 to 14 inches of row.

“The planters require two people per row to actually put the transplants in the machine,” Burdine said. “The transplanter runs at half a mile per hour, and most growers have six- or eight-row transplanter.”

A six-row transplanter carries 12 people, who hand-place each transplant into the machine.

“Because the transplant doesn’t have a root system when it is actually set, if the soil is too dry and the weather too hot, there is a chance of losing that plant,” Burdine said.

Once in the ground with sufficient soil moisture, the slips take root quickly and deeply. Within two weeks, the growing transplant is safe from all but extreme drought. After it is planted the second time, the crop is given typical weed, pest and disease control management.

Sweet potatoes are ready to harvest between early September and October. Harvest, too, is labor-intensive. There are two ways sweet potatoes can be harvested, depending on soil conditions.

A two-row harvester can move through the fields, digging potatoes out of the ground and bringing them up a conveyer belt. Workers riding on the digger pull the potatoes off the vine and generally sort them into bins by size.
One layer of sweet potatoes is poured onto prepared beds and then covered with soil and topped with black plastic. Sweet potato beds are about 5 feet wide and up to a quarter of a mile long.

The second harvesting method uses a bucket crew. Harvesters go out with 40-pound buckets and pick up potatoes that have been turned out of the ground with a plow.

The crop's labor demands add up to a high production cost. Sweet potatoes cost $2,000 to $2,500 an acre to produce. Depending on the weather, market conditions and other factors, growers can sell a crop for $2,500 to $4,000 an acre under ideal circumstances.

The state has nearly 21,000 acres of sweet potatoes in 2011, up slightly from last year. The number of commercial growers is about 105, an increase of six or seven from 2010.

Most Mississippi sweet potatoes are grown in Calhoun, Chickasaw, Pontotoc, Webster, Grenada and Yalobusha counties. Sweet potato production is centered near the Vardaman/Houston area, which has Faulkner and Adatonsilt loams. These soils are ideal for sweet potato production, as they provide drainage and allow roots to expand uniformly.

“The silt loam gives the potato a high-quality shape and great taste,” Burdine said.

Carter Edmondson, owner of Edmondson Farms in Vardaman, has been growing sweet potatoes for 40 years. His slips struggled to get established this year.

“The heat is worse than the dry weather,” Edmondson said. “Early on, we had to reset about 50 acres, and we hardly ever have to reset sweet potatoes.”

Edmondson’s 2,850 acres make him one of the largest sweet potato producers in the state. Like most growers, he rotates this crop with cotton, corn and soybeans to help fight diseases, weeds and nematodes effectively.
A new program is targeting the youngest members of families to help parents make healthy and affordable food choices.

Mississippi State University is teaching families in low-income communities about healthy, low-cost foods so they can follow nutritious diets on a budget. The efforts are funded by the ConAgra Foods Foundation, which works through national partnerships to help end childhood hunger.

As part of that mission, Chiquita Briley, an assistant professor in the MSU Department of Food Science, Nutrition and Health Promotion, developed the Snack Pack Project pilot program to teach preschoolers about the basic food groups and healthy snacking.

The Snack Pack curriculum was tested in Head Start programs in Kosciusko and Durant. A total of 15 teachers and 300 students were involved in the kickoff.

“We worked with Head Start because we know their student population is made up of children from low-income families who are at risk for food insecurity or hunger issues,” Briley said. “Preschoolers are a great age group to work with because they are so impressionable and eager to learn. Also, we wanted to demonstrate to parents that their children will actually eat healthier foods and that those foods do not have to incur additional costs for families.”

Head Start teachers received monthly lesson packets. Each packet focused on a different food group, and teachers taught weekly lessons emphasizing foods in that group. They used books, pictures and worksheets to introduce the foods, such as pineapples, to the preschoolers.

After the children demonstrated a good understanding of the concepts, teachers helped them prepare simple snacks using foods from the chosen group. Each child received a small Snack Pack backpack that contained a book, information sheet and take-home snack that included that month’s food group.

“Each snack was inexpensive and available at local grocery stores or through the Women, Infants and Children, or WIC, program. With EBT cards now being accepted at some farmers’ markets, there are even more opportunities for low-income families to access fresh ingredients,” Briley said. “We hope books will not only help promote reading, but also begin the dialogue about healthy foods in the home.”

In addition to reading, children were given the opportunity to practice simple math skills by counting out carrot sticks and other foods to include in their snack packs.
“I could see a real difference not only in the children involved in the project, but also in our instructors’ teaching styles,” said Dorothy Mitchell, nutrition director for Central Mississippi’s Head Start/Early Head Start Centers. “The teachers were incorporating the nutrition lessons throughout the day. There were many opportunities for them to reinforce the concepts, and it really increased teacher-student interaction.”

Stacey Johnson Knepple, a doctoral student in the Department of Food Science, Nutrition and Health Promotion, conducted pre- and post-tests of the children’s ability to identify specific nutritious foods.

“We also tested their understanding of ‘farm to table’ concepts; basically, trying to find out if they understand where their food comes from. For instance, do they know that milk comes from a cow before it is sold in grocery stores?” Knepple said. “We found that after the 19-week program, the preschoolers could more easily identify foods and the groups they come from.”

Knepple also polled parents before and after the program on the preschoolers’ food preferences and the variety of foods incorporated into family meals.

“We were pleased to find that the children’s enjoyment of fruits and vegetables increased after the program,” Knepple said. “It is important to get them interested in healthy eating at this age. Their knowledge of good-for-them foods will continue to expand as they enter primary school because they have this foundation.”

Briley said starting with children is key as the program moves forward.

“It is a relief to parents when they see that their children are willing to eat healthy foods, and it is even better when they realize that these meals do not need to be expensive or require a lot of preparation,” Briley said. “When parents see that their preschooler can prepare a snack by him or herself, they gain the confidence to start purchasing these foods.”

Briley said she hopes to continue the Snack Pack Project and get more Head Start centers in the state involved.

“We want families struggling to make ends meet to know that there are options,” Briley said. “The food they serve can be easy, inexpensive, healthy and delicious.”
Experience, Training Prepare MSU Extension for Emergencies

By Bob Ratliff

April 27, 2011, began like most days in northeast Mississippi, with school, jobs and other day-to-day activities keeping residents busy. By day’s end, however, communities throughout the region had been hit by a series of powerful tornadoes that left paths of destruction and death.

Hardest hit was the small town of Smithville in Monroe County. An EF-5 tornado — the classification reserved for the most powerful and destructive storms — hit the community of about 900 at 4:31 p.m., killing 16 residents. Within seconds, more than 80 percent of the town was destroyed, including all but one of 15 businesses. Most of the few remaining structures were in shambles.

Emergency responders worked through the night to rescue survivors trapped in the rubble and to meet the immediate needs those left homeless. By the next morning, emergency aid and volunteers began flowing into Smithville to begin the long recovery process.

Among the trained volunteers were B.J. McClenton and Charlie Stokes, both members of the Mississippi State University Extension Service...
staff in Monroe County. Stokes is an area agronomist, and McClinton is the Extension county director. Neither is a stranger to emergency situations. Stokes is a member of the Mississippi National Guard, and McClinton is a volunteer firefighter. Both are among more than 150 MSU Extension Service personnel trained to work in disaster areas under the Federal Emergency Management Agency Incident Command System.

“Each situation is different, but experience and training help prepare you to be aware of what’s going on around you and to respond appropriately,” said McClinton. “Basic people skills are also important in emergency situations, and Extension has a long tradition of working with the public, both in groups and one-on-one.”

The MSU Extension Service has an office in each of the state’s 82 counties. Staffing typically includes an office associate, a 4-H youth agent, one or more specialized agents and a county director. The county director usually has a specialty area, such as livestock, row crops, horticulture, family resource management, or food and nutrition.

“The expertise available in each county Extension office will be different, but Incident Command System training and professional development activities prepare county personnel to be valuable members of their communities’ emergency response teams,” Stokes said.

Following Mississippi Emergency Management Agency protocol, the MSU Extension personnel volunteered through the county emergency management director. They were assigned to prepare a furniture warehouse in Smithville to serve as a storage area for food and other emergency supplies. MSU’s North Mississippi Research and Extension Center in Verona loaned the response team a forklift and pallets for use in the warehouse.

McClinton and Stokes continued to assist with the Smithville recovery for several weeks, as did Monroe County 4-H agent James Nevins and nutrition educator Naomi Fulton. Office associates Francis Craig and Brenda Allen helped direct calls that came into the county office about recovery efforts.

Livestock producers in Monroe and surrounding counties were among those who suffered damage from the storm.

“There was widespread damage to pastures and fences from downed trees,” McClinton said. “The county staff spent as much time as possible during the weeks following the tornado assisting with fence repair and tree removal.”

Graduate students and faculty members from the MSU Department of Animal and Dairy Sciences also helped with fence repair and pasture cleanup in Monroe County. The campus-based faculty included Lamar Adams, Jamie Larson, Ann Leed, Ty Schmidt and Jane Parish.

“Getting fences back up was very important because fence damage was so widespread that large numbers of cattle were being confined to small pens on some farms,” said Parish, an Extension beef cattle specialist. “In addition to providing a service, it was also an opportunity for the students, especially those who did not grow up on a farm, to learn firsthand what it takes to run a livestock operation, especially when the unexpected happens.”

MSU Extension personnel also assisted cleanup and other recovery programs in Chickasaw, Webster and other counties hit by the late-April storms.

“As part of the nation’s Land-Grant System of universities, Mississippi State’s mission includes providing educational outreach and research support to all residents of the state,” said Gary Jackson, director of the MSU Extension Service. “In emergencies, the expertise of our personnel and the resources of our outreach programs are available to the state’s Emergency Management Agency. In recent years, Extension Service personnel have been an active part of the Katrina recovery, the cleanup efforts during and after last year’s Gulf oil spill and this year’s flooding in the Delta, as well as participation in tornado recovery work in 2010 and again this year.”

The MSU Extension Service’s work is carried out through four base programs: 4-H youth development, agriculture and natural resources, family and consumer education, and enterprise and community resource development. State specialists and area agents assist the county staffs in delivering educational outreach programs and providing university research-based information.

Kat Lawrence  Scott Corey  Kat Lawrence
After a unique summer camp experience at age 13, Mississippi State University College of Veterinary Medicine student Tori Hall knew she wanted to become a veterinarian.

“I went to a veterinary school camp at the University of Prince Edward Island in Canada, where campers were given a great deal of experience in veterinary medicine,” said Hall, a second-year CVM student from Cincinnati. “My biggest apprehension about becoming a veterinarian was the prospect of doing surgeries. At the camp, we disected a rat and were able to observe both large and small animal surgeries. After experiencing these labs successfully without fear, I knew I wanted to pursue a career in veterinary medicine.”

When she was a first-year CVM student, Hall decided she wanted to give other young people the same type of experience she had at vet camp. She collaborated with four other first-year students, met with faculty advisors and successfully planned CVM’s first vet camp.

Hall and her classmates carefully planned the camp while juggling classes, labs and study sessions. Her goal was to develop a program that would give participants a crash course in the first two years of veterinary school.

“We wanted participants to really get a feel for what vet school is all about,” Hall said. “We knew kids would leave the camp with either a deeper interest in veterinary medicine or the realization that perhaps vet school isn’t for them. Either way, kids attending the camp got hands-on experiences led by actual veterinary school professors. We think everyone had fun.

“We had more applicants than we could accommodate this year,” she added. “We have been thrilled with the interest and want to expand it next year so that we can include more kids.”

The camp was held at CVM with two three-day sessions in June for 13- to 15-year-olds. Campers participated in activities from 9 a.m. until 4 p.m. each day. They spent time in anatomy, critical care and microbiology laboratories. Campers had the opportunity to learn the two most common sutures used in veterinary surgeries and then practice those stitches on plush toys. Other sessions introduced the teens to equine and bovine health, basic canine exams, veterinary dentistry and caring for shelter animals.

“Campers received instruction in veterinary dentistry and made dental molds they could take home,” Hall said. “They also got to practice exams on dogs — checking their heart rate, tem-
perature and vision. Some of the kids even got to do a neurological exam. A really unique experience was getting to bandage horses’ legs and perform an equine dental exam.”

Susan Rodgers, a second-year CVM student from Fort Lauderdale, Fla., helped Hall with the camp and served as a counselor during the two sessions. She said the camp was all about focusing on the details and giving kids a realistic experience.

“Before suturing instruction, campers learned how to gown up for surgery properly,” Rodgers said. “They wore latex gloves and face masks while learning a new skill. It was important to keep their experiences as realistic as possible.”

Youths from as far away as Florida, Louisiana and South Carolina attended the camp. Many out-of-town campers stayed with family or friends, but some stayed with their parents in hotels. K.J. McIver from Gainesville, Fla., learned about vet camp from a current CVM student.

“I’ve been back and forth between wanting to become a veterinarian or a biotechnologist,” McIver said. “Working with real animals was my favorite part of camp. I think I’m definitely leaning more toward going to vet school now.”

Hall and Rodgers both said the camp will continue to expand to include more youths and diverse experiences.

“It’d be great to try for an overnight camp, so the kids can get even more experiences like working outside with animals in the early evening when it isn’t as hot,” Rodgers said. “This was a successful test run, and we look forward to seeing where it goes next year.”

Hall is going back to the University of Prince Edward Island’s vet camp, now in its 10th year, to get more ideas for CVM’s camp. What will always remain a part of CVM’s program is exploration and hands-on experience.

“Watching the kids try new things and learn has been a lot of fun for us,” Hall said. “The campers remind a lot of us of ourselves 10 years ago. I’m glad to be a part of it all.”

“We wanted participants to really get a feel for what vet school is all about. We knew kids would leave the camp with either a deeper interest in veterinary medicine or the realization that perhaps vet school isn’t for them.”

Tori Hall
In 1907, William Hall Smith, superintendent of schools in Holmes County, began teaching students in his schools “modern” corn production techniques. His Corn Club students’ half-acre plots were soon yielding twice as much as their fathers’ fields, demonstrating that the agricultural future of Mississippi and the rest of the South did not have to be tied to just cotton and that farm youth benefitted from staying in school.

The work by Smith and other pioneers like him led to the passage of the Smith-Lever Act in 1914, which established the national Cooperative Extension Service. Extension’s grassroots approach to providing science-based education to rural Americans helped our nation lead the world in food production.

As it nears the century mark, Extension now reaches all members of society with services such as community development, youth, food, nutrition and health education programs, while continuing to provide university-based support to those Americans who devote their lives to production of our food and fiber.

Today, there are those who say the Extension Service is outdated and has outlived its usefulness. They are wrong.

The Extension Service doesn’t look the same as it did in 1914, when farmers were about 30 percent of the American workforce. As time and technology have progressed, so has the Extension Service. By adapting to the needs of our clients and communities, we have expanded our services. We remain passionate about our vital agricultural and natural resources; however, our programs also include community resource development, 4-H/youth development, and family and consumer sciences. These topics are relevant to Mississippians, whether they live in the city, the suburbs or the country.

We are the only public agency with federal and state mandates to provide statewide adult education programming. In fact, the Extension Service is the only statewide, organized adult education entity funded by taxpayers. Because we have an organized educational delivery system, many other organizations and agencies wish to partner with us. We serve all Mississippians seeking the information and resources they need — not just the people who can afford an education. Yet, many forget about the Extension Service when they think of the spokes on the education wheel. Education is more than K-12, community colleges and universities. Education includes the Extension Service. Extension personnel are the teachers who deliver statewide professional development, such as helping early childhood professionals offer quality programs, helping livestock producers better manage their forage quality or helping restaurants improve food quality standards.

Why is the Extension Service still relevant?

The Extension Service was established to deliver research-based information to the public to improve their lives. Unlike industry groups, who market a particular product, the Extension Service provides unbiased information generated by scientifically driven inquiry. Most importantly, our research is based on what our clients need. Needs-based projects designed specifically for issues facing Mississippians, such as the development of specific methods or systems to battle and prevent glyphosate-resistant weeds, are the foundation of our work.
No other organization in the state can respond as quickly and as broadly as the MSU Extension Service. With a well-established infrastructure based in 82 county offices, four Research and Extension Centers, and multiple centers and institutes, our field staff serves thousands per year. When there is a disaster, such as the recent tornado outbreak, Delta flooding or Deepwater Horizon oil spill, our trained staff mobilizes rapidly to aid the communities and the agricultural, wildlife and natural resources impacted. This ability to connect with Mississippi’s widespread and diverse population facilitates partnerships with state and federal agencies, as well as private foundations that want to have a positive impact on people’s lives. The Extension Service remains committed to local citizens. While agencies such as the Natural Resources Conservation Service and Department of Health have closed local/county offices, Extension maintains local efforts to improve community life through enhanced opportunities for intellectual exchange, creativity and innovation. Today, agencies that no longer have local, grassroots connections are partnering with the Extension Service to deliver educational programs. Our personal connection at the local level gives Extension staff members the opportunity to encourage individuals and groups to address change through problem solving and empowerment.
The Extension Service was built on a foundation of authentic relationships with individuals in our communities. Those deeply rooted associations help us deliver the high-quality content our clients expect. Change is not easy, but when clients can turn to a trusted source for information, change is not as challenging. They know someone who will help them when they are in need. Human behavior research shows that citizens want to know who their local Extension leaders are and that they live within the local area. We’re committed to maintaining local ties to keep our communities strong. People want to know who they are getting their educational and problem-solving information from; they must trust the individual before they will apply the knowledge. Local citizens have always trusted their local Extension agent, and they still do today.

Chloe Gray, 4, a student at Train Up a Child Christian Learning Center in Clinton, takes a leap during physical development activities as part of the Nurturing Homes Initiative (NHI). As part of the Extension Service, the NHI partners with home child-care programs where caregivers open their homes to create safe learning environments. NHI has worked with more than 1,200 in-home caregivers to improve learning opportunities for about 6,000 children.
People no longer rely on traditional methods and sources for getting the information they need. We understand that and are committed to meeting the needs of all Mississippians: all clients, all age groups, all interests, all areas of the state. To do this effectively, we’re transforming our organizational approach to technology. We are increasing technology education programs for both youths and adults to connect Mississippians with the resources they need to live well. From distance-education opportunities to social media like Facebook and Twitter, Extension personnel use every relevant tool to make a difference in the lives of others. Our crop experts, such as Angus Catchot, Erick Larson and Darrin Dodds, are blogging to ensure timely information gets to growers and producers quickly. Our Extension Technology/Outreach staff is developing agricultural apps for smart phones and interactive educational games.
The Extension Service is more than relevant. It’s essential. How do we know?

Allies: We partner with many associations and stakeholder groups, such as the Mississippi Homemaker Volunteers, the Delta Council, the Mississippi Cattlemen, the 4-H Volunteer Council, and the Mississippi Fruit and Vegetable Association. Our partnerships have helped us build strong networks to deliver more to the people of Mississippi.

Trust: In 2011, the Mississippi Legislature passed three new laws that identify the MSU Extension Service as the organization responsible for delivering educational programming and regulatory services in three areas. Senate Bill 2196 requires all-terrain-vehicle (ATV) operators on public land to possess a driver’s license or to undergo training and earn certification. This law mandated the MSU Extension Service to design an ATV safety course to enable riders to comply with the new regulation. In fact, our 4-H program and staff were ahead of the curve, with eight certified All-Terrain Safety Institute instructors ready to deliver programming at a permanent ATV safety-training trail under construction in West Point. Senate Bill 2450 identifies the MSU Extension Service as the source for technical assistance to farmers seeking to comply with state and federal organic certification requirements. Our legislative bodies entrust the Extension Service to educate and inform the people.

Awards, Appointments and Patents: Our people and programs receive local, state, regional, national and international recognition for the work they do. Not only do they receive awards for their personal and collaborative research projects, they are recognized for the services they provide to their respective fields, stakeholders and clients. Our experts are appointed to policy groups and regulatory boards, and they have been identified as fellows for their contributions to their industries. For example, family resource management area agent Rita Green was appointed to the U.S. Department of Agriculture’s National Agricultural Research, Extension, Education and Economics Advisory Board. Louise Davis was named to the Governor’s Early Childhood Advisory Task Force because of her national prominence in the field of early childhood development. John Michael Riley was sought out and interviewed by ABC News and USA Today for his work concerning the impact of flooding on agricultural commodities. From turf grass to enhanced wood preservative composition, our scientific knowledge base improves Mississippi’s industries, businesses, individuals and families.

Needs change and so does the Extension Service. Every day, our team of experts will meet the needs of a diverse clientele in unique situations across our large state, and they adopt and adapt new technologies to do so.

The Mississippi State University Extension Service is a trusted source of scientifically proven knowledge and information. We have traditionally provided this service to our citizens and will continue to provide it as a part of our land-grant mission. The Extension Service is needed more today than ever before, considering the problems and issues we are facing. Never in history has the need and demand for information been greater.

So, yes, Extension is still relevant.
FOCUS

Mississippi’s 4-H program received a grant from the National 4-H Council to train youths and adults to become safe and responsible ATV operators. As part of the grant, a group of Extension Service 4-H professionals became All-Terrain Safety Institute instructors. To expand ATV safety efforts, Mississippi 4-H also has received funding from the Mississippi Department of Wildlife, Fisheries and Parks to build a permanent ATV safety-training trail in West Point on land donated to 4-H by the Bryan family.

An Extension Service financial literacy program leaves lasting impressions on high school students as they get a taste of handling finances in the real world. “Welcome to the Real World” introduces students to realistic scenarios and the budgeting challenges life can bring. Seven MSU Extension agents in different regions of the state bring the program to school groups ranging from 10 students to 300 or more.
COUNTY MUSEUM
Shows Images of the Past, Visions of the Future

By Karen Templeton • Photos by Kat Lawrence

The Oktibbeha County Heritage Museum in Starkville reminds visitors of what a small Southern community once was, but also what it could be.

The museum provides a glimpse into the history of Starkville and Oktibbeha County through a collection of artifacts, memorabilia and antiques. When flooding caused by runoff threatened the building and its collections, a team from the MSU Department of Landscape Architecture was called in to assist. In its effort to provide a new landscape design to manage storm water, the team is also demonstrating to the community the importance of sustainable landscapes.

"The museum’s director, Joan Wilson, contacted us back in 2008 about storm water issues,” said Wayne Wilkerson, associate professor of landscape architecture at MSU. “Water that normally would flow to a drain was collecting under the building and causing damage.”

Wilkerson, also the director of Mississippi’s Water Resources Research Institute, worked with his colleague Cory Gallo, assistant professor of landscape architecture, to develop a plan for the museum’s landscape.

“We prepared a master plan to solve the drainage problem but also provided them with a long-term solution for storm water management through rain water harvesting and infiltration,” Wilkerson said. “We came up with a plan to turn the landscape into an educational unit so homeowners have the opportunity to learn how to implement similar systems into their own landscapes.”

The multiyear landscaping project began in 2009, and the
third phase was completed this spring. A fourth phase will be completed in fall 2011 and the fifth in spring 2012.

“We started with the rain garden and sand filter,” Gallo said. “The rain garden absorbs rainwater runoff, and the sand filter acts as a cleaning and detention system. It filters out sediment and debris as the water moves through it.”

The new landscape also provides a new outdoor learning and recreational area.

“We provided an area that serves as a mini-amphitheater, and the museum is going to utilize the space by holding a movie series,” Gallo said. “The second outdoor area we will complete is a space for parties and gatherings. We wanted to create spaces that are inviting and useful.”

The project is funded by The Friends of the Museum, as well as by grants and individual donations. The museum’s board must approve each phase of the design, and the Starkville Board of Alderman must review and approve any requests made of the city.

“The city has helped provide labor and necessary equipment,” Gallo said. “This project wouldn’t be possible without the help of the city of Starkville.”

Students in Gallo’s Construction II classes assist with the design and implementation.

“Each year, the students in that particular class help tackle a phase of the design and implementation,” Gallo said. “The students provide an average of 20 hours of labor over a two-week period. Most of the students have provided more than the required time.”

In spring 2011, students helped demolish an old deck entrance and reconstruct a new one with composite materials and built-in seating for patrons.

“Some students had never used a hammer, and some had a lot of construction experience. We tried to give assignments based on their abilities and experience,” Gallo said. “The whole project has been a great learning experience for them. Students who have worked on earlier phases sometimes come back to check out the progress. They take real pride and ownership.”

Local Master Gardeners are also helping with the landscape installation.

“The Master Gardeners have helped us come up with a plant palette, and they’ve also assisted in installation and maintenance,” Gallo said. “During the times we don’t get a lot of rain, they’ll come out and water the plants.”

The next phase of the design will include the installation of cisterns that will be used to harvest rainwater for use in the landscape. The team will also provide signs for the garden to explain the different sustainable landscaping systems.

“We’d like for people in the community to implement these systems in their home landscapes,” Wilkerson said. “If rain-harvesting techniques were implemented at every house, we’d see benefits on a very large scale well into the future.”

These simple infrastructure solutions can do something else, too.

“In addition to providing protection to the environment and our water supply, they also look good,” he said.

Museum Director Joan Wilson said the landscape facelift has done much more than originally anticipated.

“We are thrilled with what the new design has done for our museum,” Wilson said. “They’ve corrected our storm water issues, which helps protect our building, but they’ve also made the museum more visible and inviting.”

Wilson is also excited about the museum being a showplace for innovative landscaping.

“Most people have heard about rain barrels or cisterns, but here, they’ll get to see them put to use and learn how to do it in their own gardens,” she said. “The work done here is a real addition to our community.”

For more information on the museum, visit http://oktibbe-aheritagemuseum.com/wordpress.
One of America’s fondest symbols, the bald eagle, could be flying high again after a concerned citizen and three organizations worked together to save its life.

A passerby noticed an injured bald eagle in the Burnsville community near County Road 306 and immediately sought help.

“The eagle was brought into the Alcorn County Department of Wildlife office by the gentleman who found him,” said Blake Palmer, conservation captain for the Mississippi Department of Wildlife, Fisheries and Parks’ Northern District. “The bird seemed to be really distressed and definitely couldn’t fly. All we knew for certain is that it needed help.”

Palmer and another officer transported the eagle to the Mississippi State University College of Veterinary Medicine. Dr. Lori Haas, clinical sciences instructor, and veterinary technician Maggie Horner were ready and waiting at the CVM Animal Health Center for the eagle to arrive.

“We did a quick physical and assessed his symptoms,” Haas said. “We were able to determine he was a juvenile bald eagle. Despite being young, he was large, with a 5- to 6-foot wing span.”

Haas supervised as Horner and a team of CVM veterinary students evaluated and stabilized the eagle.

“His needs were assessed quickly. It was important that we got him fluids to control his hydration,” Horner said. “We kept him isolated from the other animals to keep him calm and to help relieve his shock and distress.”

After the eagle was stabilized, the team made calls to find where the eagle could get necessary treatment.

“CVM’s role is to evaluate and stabilize the wildlife patients we receive and then find them placement at a facility that provides surgical procedures to wildlife,” Haas said. “We are always able to find a suitable place where the animals can be treated and stay to recover. This time, we secured a spot at the Jackson Zoo for our patient.”

After six hours of treatment at CVM, two veterinary students transported the eagle to Jackson.

“The eagle was in good condition when he arrived at the zoo,” said Dr. Michael Holifield, contract veterinarian for the Jackson Zoo. “He was what we call BAR — bright, alert and responsive. He was just thin due to lack of food.”

Holifield and his team decided to operate to remove the pellet from the eagle’s wing. After multiple attempts, Holifield left the pellet because it was lodged in the wing in such a way that it could not be removed safely.

“The eagle’s wing is healing, and we’ve done an additional procedure to enhance his bone healing,” said Holifield, who owns All About Animals clinic in Crystal Springs with his wife, Dr. Becky Holifield, both of whom are Mississippi State CVM graduates. “He’s doing well with the recovery process and is eating and drinking. The entire healing process just takes time.”

Holifield credits CVM with getting the eagle well enough for further treatment.

“The fact that CVM had already stabilized and hydrated the bird made our job a lot easier,” he said.

The Jackson Zoo is providing care to the eagle as it recovers. Their goal is to release the eagle into the wild after proper rehabilitation.

“He can’t fly yet, but we are optimistic,” Holifield said.

Palmer said he is thankful for the concerned citizen who found the eagle. The quick response and well-coordinated teamwork helped in the eagle’s healing process.

“We are still investigating how this happened to the eagle,” Palmer said. “A $2,500 reward is being offered for information leading to the arrest of the person who shot him.”

Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act, both federal and state wildlife statutes. Anyone with information concerning this eagle is asked to call the Grenada Office of Law Enforcement with the U.S. Fish and Wildlife Service at (662) 227-0990 or the Mississippi Department of Wildlife, Fisheries and Parks at (800) 237-6278.
Hard work and a commitment to quality resulted in a Crawford child care center becoming one of the most highly rated programs in the area.

The Love & Learn Day Care is operated by director Joyce Lowery and assistant director Geraldine Farmer. The Mississippi Child Care Quality Step System rewarded their hard work by granting the center a four-star rating during its assessment. Attaining a four-star rating is a rare achievement; only 14 out of 501 rated child care centers in the state have gained this designation. Lowery and Farmer credit the professional development workshops and technical assistance provided by Mississippi State University Extension Service as a key element in their center’s progress.

Commonly called the QRIS, or Quality Rating Improvement System, the Mississippi Child Care Quality Step System is a voluntary program designed to increase the quality of early-childhood environments. The system assesses centers with nationally normed environment rating scales. Independent evaluators from the Early Childhood Institute visit participating child care centers, review center records, evaluate classroom environments and observe staff-child interactions.

“When we first began the QRIS program, we got two stars. In 2009, we got three. This year, we got four, which is how I wanted it to be, with continuous improvement,” Lowery said. “We took courses above and beyond the QRIS requirements. At faculty meetings, we’d discuss what we learned and how to apply it in our classrooms.”

MSU Extension associate Lucy Bryant of the Mississippi Child Care Resource and Referral (MSCCR&R) Network helped the teachers and administrators of Love & Learn to apply best practices and prepare for their QRS visit.

“You can tell these children are loved and happy,” Bryant said. “This isn’t a center with loads of money. They planned carefully with the money they have, used community resources and volunteers to help, and they checked out resources from the MSCCR&R Network’s lending library to supplement their materials.”

“We were motivated to be in QRIS because we wanted to make sure we had quality child care in our area. If someone could help make our center better, we asked for their help,” Lowery said. “We want to be the best we can for our children and parents.”

“We want people to know that even in a low socioeconomic area, you can still offer quality child care,” agreed assistant director Glenda Freeman.
Most duck hunters look forward to the thrill of mimicking duck calls to attract members of the flock.

James Callicutt, a former Mississippi State University graduate student, has spent much of his life as a duck hunter and call maker. Most recently, he has studied the sounds of female mallard ducks and compared them to sounds from man-made duck calls constructed of different types of materials.

Although duck calls originated in the 1850s, Callicutt is the first to scientifically compare the acoustic features of wild female mallard calls to the acoustic features of humans using duck calls. As part of his graduate research in the MSU Department of Wildlife, Fisheries and Aquaculture, Callicutt found a way to measure the accuracy of man-made duck calls, which helps hunters create more realistic calls.

“Female mallards make numerous sounds. The most common is the decrescendo, or hail, call,” Callicutt said. “The decrescendo typically consists of five to six quacks, with the loudest in the first and second note.”

Decrescendos are the sounds most often imitated by duck callers. Callicutt recorded 620 decrescendos of wild female mallards during the winters of 2008 and 2009. He then constructed duck calls from acrylic and different types of hardwood.

“Calls were made of native woods, including osage orange, yellow poplar, black walnut, pecan and red oak,” Callicutt said. “We also used exotic bocote and cocobolo from South America and Central America because these are used in commercial production of wooden calls.”

Callicutt made 16 experimental combinations of calls. He fitted seven hardwood calls and one acrylic call with single or double plastic reeds, which create sound by vibrating when the calls are blown. The next step in his research was to assemble a group of experienced duck callers.

“We asked prospective callers if they considered themselves an average-to-good caller and accepted their participation in the experiment if they replied ‘yes,’” said Rick Kaminski, wildlife ecology and management professor and Callicutt’s major professor. “We assumed the 38 callers were a representative cross-section of duck hunters capable of calling ducks in the field.”

The duck callers listened to a recording of a randomly chosen female mallard and were asked to mimic the recording using each of the 16 duck calls. Researchers used specialized software to digitize and compare the calls of the mallards and callers. This comparison showed that duck calls equipped with double reeds created more accurate calls. In addition, the top 10 calls were made from denser materials.

“We found that cocobolo, bocote, pecan, osage orange and acrylic with double reeds most resembled the descrescendos of female mallards,” Kaminski said. “Besides these hardwoods, duck call manufacturers could use hardwoods with similar density and hardness, such as hickories and persimmon.”

The research provides valuable information to duck call manufacturers and hunters, and Callicutt’s work has landed the New Albany native with a start-up company specializing in duck calls. While his company, Hardwoods Waterfowl Calls LLC, may not replace his career as a waterfowl biologist, his blend of research, entrepreneurship and passion has created new opportunities for the university alumnus.

“This research allowed me to combine my hobby of making duck calls with my education and has now given me an opportunity for a business,” Callicutt said. “I have something unique to offer duck hunters: a scientifically evaluated duck call.”

By Karen Brasher

MSU STUDY
Determines Realistic Duck Call Materials

Stock Photo
1/82: Lee County

The birthplace of Elvis Presley is located in Tupelo. The house was built in 1934 by Vernon, Vester and Jesse Presley.

County Seat: Tupelo
Population: 82,910
Municipalities: Tupelo, part of Baldwyn, Guntown, part of Nettleton, Plantsville, Saltillo, Shannon, Verona
Commodities: Beef Cattle, Cotton, Soybean, Corn, Forestry, Wheat, Fruits and Vegetables


Natural Resources:
Timber, wildlife, 13 lakes, Tombigbee State Park, Elvis Presley Lake and Campground

History Notes: Lee County was formed on Oct. 26, 1866, from parts of Itawamba and Pontotoc counties. It was named for Confederate General Robert E. Lee.

Attractions: Natchez Trace headquarters, Tupelo Automobile Museum, Bancorp South Arena, Oren Dunn Museum, WTVA TV Station, Mall at Barnes Crossing, Downtown Farmers Market, Lee County AgriCenter

MSU Extension Service in Lee County:
Lee County Extension Office
5338 Cliff Gookin Boulevard
Tupelo, MS 38801
Email: lee@ext.msstate.edu

Attractions: Tupelo Furniture Market, Ballard Park, Healthworks, Gumtree Museum of Art, Lyric Theatre, Pvt. John Allen National Fish Hatchery, Tupelo Regional Airport, Sanctuary Hospice House, Tupelo Buffalo Park and Zoo, Elvis Presley’s Birthplace and Museum, two Civil War battlefields (Tupelo National Battlefield and Brice’s Cross Roads National Battlefield), and satellite campuses of University of Mississippi and Itawamba Community College

Annual Festivals/Activities: Blue Suede Cruise, Azalea Festival, Dudie Burger Festival, Fall Classic Livestock Show, Northeast District Livestock Show, Tupelo Film Festival, Elvis Presley Festival, Gumtree Festival, All-American City Picnic, Celebration Village and Fall Chili Fest

Did you know? Extension has strong roots in the history of Lee County. The famous Elvis Presley 1956 Homecoming Concert was performed at the Mississippi-Alabama State Fair and Dairy Show. Harry A. Martin, longtime CDF executive director, was a former Lee County Extension agent. He credits Extension connections for progress made in early years. The North Mississippi Research and Extension Center is located in Verona. The center serves the agricultural needs in northeastern Mississippi.

“Helping people help themselves is our main goal in Lee County.”
Sherry Smith, Extension County Director

Editors note: 1/82 is a regular feature highlighting one of Mississippi’s 82 counties.
MSU’s Crosby Arboretum Gets a New Director

Pat Drackett is the new director of Mississippi State University’s Crosby Arboretum in Picayune. Drackett has been the senior curator at the arboretum since 2007. In that role, she has developed, implemented and promoted the arboretum’s programs and public events. Since her arrival at the arboretum, Drackett has provided public outreach and education to the area’s schools and community organizations.

“Pat has helped the arboretum become a part of people’s lives by maintaining its beauty and developing new programs,” said Patricia Knight, head of the MSU Coastal Research and Extension Center.

A lifelong gardener, Drackett earned a bachelor’s degree in botany from the University of Tennessee and a master’s degree in landscape architecture from Louisiana State University. She spent 20 years as a landscape designer and horticultural consultant before working at the arboretum.

Pote Named Head of MSU Department

Jonathan Pote has been named head of the Department of Agricultural and Biological Engineering at Mississippi State University.

Pote has served as interim head of the department since July 2010. He joined MSU in 1985 and has held a variety of administrative positions, including associate vice president for research and economic development and associate director of the Mississippi Agricultural and Forestry Experiment Station.

“We are fortunate to have someone with Dr. Pote’s leadership experience and outstanding record of academic and research achievement to head this department,” said George Hopper, dean of the College of Agriculture and Life Sciences.

Pote earned his doctorate in engineering from the University of Arkansas. He obtained his master’s degree in environmental engineering from Oregon State University and his bachelor’s degree in chemistry from Hendrix College in Arkansas.

MSU Welcomes New Department Head

J. Mike Phillips has been selected as the new head of the Department of Plant and Soil Sciences.

Phillips has been chairman of the Department of Agricultural Sciences at Morehead State University in Kentucky since 2007. Before his appointment at Morehead, Phillips served as professor of agronomy and director for the Southwest Research and Extension Center at the University of Arkansas.

“Dr. Phillips has an extensive background in teaching, research and Extension,” said George Hopper, dean of the College of Agriculture and Life Sciences. “His leadership capabilities will be invaluable to the plant and soil sciences department.”

Phillips earned his doctorate and master’s degrees in agronomy from the University of Arkansas. He obtained his bachelor’s degree in agriculture from the University of Arkansas at Monticello. Phillips has been the recipient of numerous awards and honors and was elected vice chairman of the Agri-Energy component of the Governor’s Task Force on the Future of Agriculture in Kentucky.

MSU Units Combine to Improve Services

Mississippi Variety Testing and Mississippi Foundation Seed Stocks, both research support units in the Mississippi Agricultural and Forestry Experiment Station, have been merged. The two units have worked together for more than a decade.

Brad Burgess, currently the variety testing unit’s...
director of research support, will oversee the newly created Mississippi Variety Testing and Foundation Seed.

“Foundation Seed is an important source of quality seed for rice growers, and variety trials are necessary so that growers can see performance based on their particular geographic area,” said Reuben Moore, associate director of MAFES. “The functions of these two important units will remain the same, but the merger will improve efficiencies and strengthen services to producers throughout the state.”

Newman Named MSU Human Sciences Director

A Mississippi State University professor with more than 20 years of experience is the new director of the School of Human Sciences.

Since 2004, Michael Newman has served as a professor in the Department of Agricultural Information Science and Education and also as a specialist for the MSU Extension Service. Newman has been responsible for planning and evaluating both Extension programming and many grant-funded projects. The use of technology in agribusiness and education is one of Newman’s areas of expertise.

“Dr. Newman has played a key role in developing the federal five-year Plan of Work and state strategic plans,” said Gary Jackson, director of the MSU Extension Service.

Newman began his career at MSU as a graduate research assistant in 1989 and worked in various positions at MSU after he attained his doctorate in agricultural and Extension education in 1991.

Dairy Science Encyclopedia Guided by MSU Expert

A comprehensive reference publication on the various aspects of dairy science was recently published under the leadership of a long-time Mississippi State University professor.

John Fuquay, now professor emeritus in the MSU Department of Animal and Dairy Sciences, is editor-in-chief of the second edition of the Encyclopedia of Dairy Science. Fuquay served as the dairy production editor on the first edition and in 2008 was asked to be the primary editor of the second edition.

“Dr. Fuquay oversaw the publication of an extensive body of work that includes information on major dairy regions in the world, including Africa, China, southern Asia and South America,” said Terry Kiser, head of animal and dairy sciences. “His expertise was essential in widening the scope of the articles included.”

Fuquay, who taught dairy science at MSU from 1969 until 1999, has served internationally as a consultant and lecturer in countries such as Thailand, Mexico and Nicaragua.
The late Leroy H. Boyd was an inspiration to those who believe that happiness can be found in the quest for knowledge and that a strong work ethic deserves to be rewarded. Boyd, a professor emeritus of animal and dairy sciences at Mississippi State University, died in January 2011 at the age of 75. A recently established memorial scholarship in the MSU College of Agriculture and Life Sciences honors Boyd’s dedication to education and his life’s work as a teacher and researcher. Boyd understood the need for scholarships at Mississippi State, having served for several years on the university scholarship committee. He also experienced firsthand how scholarships can help students realize their potential.

In 1963, Boyd joined the Mississippi State faculty of what was then called animal husbandry and later became animal and dairy sciences. He retired in 2001 after 38 years of service. Throughout his career, thousands of students felt the influence of Boyd’s teaching at Mississippi State. They affectionately referred to him as “Doc” and learned to appreciate his wit and humor. He taught courses related to sheep, horses, livestock management, beginning animal science and western equitation. He also coached the university’s livestock judging team in the early years of his tenure.

Over his lifetime, Boyd became one of the most well-known sheep educators in the United States. He demonstrated that sheep could be successfully raised in the extreme heat of the South. Through the years, he developed what came to be known as “adapted Dorsets.” These sheep actually thrived in the Southern climate and were released through public auctions. Many of them became the foundation breeding for several flocks of sheep around the Southeast that are still in existence today.

Boyd judged sheep at livestock shows in almost every state and especially enjoyed judging the junior shows where young people were so receptive to learning. From the time his daughters, Susanne and Diane, became involved in 4-H, the family kept a small flock of sheep on Boyd property near Starkville. It was natural that Boyd would also become interested in Border Collies, and he often was called on to demonstrate the skill of the dog and handler in working sheep.

Boyd’s interest in sheep began on his family’s farm. He was born and raised in western Oklahoma’s Ellis County at the height of the Dust Bowl, when dust storms caused major ecological and agricultural damage to prairie lands. His grandparents had purchased the farm in 1907, the year Oklahoma became a state. Boyd learned life lessons that served him well as he grew up on the working farm, raising lambs and steers as 4-H projects.

A small scholarship from the local Home Demonstration Club, as it was called at that time, along with money he earned from his 4-H projects, afforded him the opportunity to enroll at Oklahoma A&M, which later became Oklahoma State University. He lived and worked at the campus sheep barn during the school year and spent summers working for prominent sheep producers. He also sheared sheep when he could to bring in extra income while an undergraduate and later as a graduate student.

By working his way through college, Boyd earned a Bachelor of Science degree in animal science from Oklahoma State University and Master of Science and doctoral degrees in animal science from the University of Kentucky.

Boyd met his wife, Catherine, while they were in college. They later attended the University of Kentucky together. The Boyds were married for 52 years and enjoyed success-
ful careers at Mississippi State. Catherine Boyd is professor emeritus of human sciences, having served on the MSU faculty for 33 years.

“Accolades were not that important to Leroy,” Catherine Boyd recalled. “It was witnessing the success of his work and seeing and hearing about the success of his students that made him happy.”

Boyd also enjoyed seeing the changes that took place at Mississippi State through the years. He served on the MSU Faculty Senate and was chair for two terms. It was in this role that he had the opportunity to work closely with MSU President Emeritus Donald W. Zacharias and many others at the university.

“I greatly appreciated the professionalism of Leroy Boyd during my days as an administrator at Mississippi State University. He had his values straight. He listened carefully to his students and to his colleagues and was prepared to act,” said Zacharias, who led MSU from 1985–1997.

“As a member of the Faculty Senate, Leroy shared with me his interpretation of what was needed on campus,” Zacharias continued. “I appreciated his helpfulness on many topics. He recognized the widespread need for scholarships to assist our students and participated often in committees that selected students for their academic ability or need for financial aid. With a strong sense of humor, he carried out his work in a clear commitment to integrity and thoughtfulness.”

Over the years, Leroy and Catherine Boyd supported MSU with their time and resources. They contributed to scholarships, the library, the Historic Costume and Textiles Collection and the Bulldog Club, and they named a room in the Lloyd-Ricks-Watson Building, among other philanthropic endeavors. Now, Catherine Boyd is continuing her husband’s legacy with the scholarship.

The couple’s daughters, Susanne Purvis of Houston, Texas, and Diane Schultz of Tuscaloosa, Ala., agree that their father gave his all to MSU, and the scholarship is a way to honor his memory and keep investing in the university’s students.

As the inaugural recipient of the scholarship, Tyler Butts began his senior year of study at Mississippi State this fall. He is a biochemistry major from Senatobia who plans to graduate in May 2012.

Butts has been employed as a student worker by several campus departments, most recently assisting with research in the MSU Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology. For his efforts, Butts will receive $1,000 toward his studies as recipient of the Dr. Leroy H. Boyd Endowed Scholarship.

“It is an honor to receive a scholarship named for such an esteemed former faculty member,” Butts said. “Dr. Catherine Boyd’s benevolent gift in memory of her husband has inspired me to work even harder as I pursue my educational goals and hopefully one day make a positive difference because of my educational pursuits.”

Boyd’s support, service and generosity had a profound impact on Mississippi State and higher education in the Southeast. His spirit will live on through future generations of outstanding, hardworking students who share his values and seek to realize their dreams through an MSU education. The Dr. Leroy H. Boyd Endowed Scholarship remains open for additional contributions through the MSU Foundation.
It’s all in the name. Check it out for news and information from the Division of Agriculture, Forestry and Veterinary Medicine.