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Late fall is a time to reflect on the year’s events, and Mississippi has faced many challenges during 2010. The tornadoes and flooding that struck northern and central areas of the state in the spring were followed by the Gulf oil spill that disrupted lives and livelihoods on the Coast during the summer.

With Extension Service offices in every county, Mississippi State is able to assist other state and local responders during emergencies. That was the case during the weather disasters, with Extension county personnel working side by side with Red Cross volunteers, state emergency management officials and others to help provide meals, clothing and shelter to those whose homes were destroyed or damaged by tornadoes or flooding.

During the long weeks when thousands of gallons of oil flowed into the Gulf every day, MSU personnel with the Extension Service, the Mississippi Agricultural and Forestry Experiment Station, the Forest and Wildlife Research Center and other university units assisted coastal residents with cleanup efforts, helped commercial fishermen navigate the paperwork necessary to receive disaster assistance, collected data to help document the oil spill’s impacts and provided other services.

Mississippi State University Extension Service and research personnel also worked with their counterparts in Texas, Louisiana, Alabama and Florida as part of the Northern Gulf Institute’s oil spill recovery task force. This multistate cooperation has led to funding by British Petroleum and other sources for help with marine fisheries recovery, stress management education and other coastal recovery programs.

This is also a good time to reflect on the accomplishments of our students in the Division of Agriculture, Forestry and Veterinary Medicine. One example is the five second-year veterinary medicine students who used their personal funds and money they raised to participate in a veterinary mission trip to help animals in need in Central America. Their story is on page 10 of this issue of Landmarks.

While we may use this time to look back, this is also a time to look forward. Student enrollment in the division and across the rest of the university is growing, and that trend is expected to continue. This trend provides opportunities we look forward to and challenges we are prepared to meet.

I also want to thank personnel throughout the division for all they have done during the past year. Their commitment to the university and to the state of Mississippi has helped MSU meet challenges in a positive way and created opportunities for growth, both in size and in service.

Gregory A. Bohach
MSU Study Examines Turf for Cemetery Use

“The big challenge with cemeteries is budget. If you want a cemetery to look good, there is nothing that will look better than turf, but it is expensive to maintain.”

WAYNE PHILLEY
By Bonnie Coblentz

Mississippi State University researchers found it takes a special kind of turf to keep a cemetery looking nice without frequent maintenance.

Wayne Philley, an agronomist with the Mississippi Agricultural and Forestry Experiment Station, was the lead researcher on a three-year study that examined turf performance and maintenance requirements in a cemetery setting.

Researchers planted St. Augustinegrass, centipedegrass, zoysiagrass, bermudagrass and Mississippi Supreme, an ultra-dwarf bermudagrass. They examined each turf’s performance in Mississippi’s climate, its mowing requirements and its ability to compete with weeds without regular fertilizer applications.

“The big challenge with cemeteries is budget. If you want a cemetery to look good, there is nothing that will look better than turf, but it is expensive to maintain,” Philley said. “The more you put into turf, the better it looks, but maintenance can be expensive.”

Wayne Wells, turf specialist with the MSU Extension Service, said the state has many small church and private cemeteries scattered across each county. There are no actual data on the acreage devoted to cemeteries in Mississippi, but Wells estimated it to be more than 3,000 acres.

“There is a wide range of costs to maintain cemeteries per acre, as some do nothing more than mow, while others fertilize, water, mow, edge, maintain shrubs and have scheduled flower placements and removals,” Wells said. “I would estimate a range of $300 per acre per year for those who do minimal maintenance up to $1,200 per acre per year for those who do extensive maintenance.”

Wells said new, large, for-profit cemeteries typically use one species of turf and organize plots into straight rows. Small church and private cemeteries may contain several turf species planted by family members, and plots are often randomly placed, making maintenance much more difficult.

Weeds are a challenge to all lawns in the state, and cemeteries are no exception. Many cemeteries are old and located on church or family property. These are usually maintained as needed by a church member or relative using just a mower and string trimmer.

“Weeds take away from the uniformity of the turf,” Philley said. “The first and best defense against weeds is healthy, active-growing turf. Good turf management requires frequent mowing, fertility, weed control and disease control. There may be a cemetery out there that does all these practices, but most of them don’t have the budget.”

Another challenge is establishing turf quickly over a newly dug gravesite. Philley said digging a grave exposes the subsoil. It is difficult to establish turf on subsoil rather than topsoil, especially without irrigation.

“Many families want to put turf on their gravesites, and if the area is small enough, it is reasonable to use sod,” Philley said.

The MSU cemetery turf study took all these factors into consideration and came up with some primary research findings.

“St. Augustine is a high-quality turf that requires at least weekly mowing, and it works fine in the southern half of the state, especially the lower third of the state,” Philley said. “Farther north it faces more chances of winter injury. St. Augustine is the most shade tolerant of the warm-season turfgrasses but one of the least cold tolerant.”

Centipede is well adapted to poor soils, but it does not have the color or lush density of St. Augustine or zoysia. However, it is a good, low-maintenance grass that grows well without nitrogen fertilizer.

“Zoysia established from sod is a good choice. If it is good sod and you can supply enough water to get it established, it will last for a long time,” Philley said. “It is difficult to mow because of the silica in the leaf blades, but well-maintained mowers can do a good job cutting it.

“Solid sod is the only recommended method of planting zoysiagrass in cemeteries. Plugging or sprigging methods are too slow and will likely result in weed establishment,” he said.

Bermudagrass is a good choice if the cemetery will be highly maintained, but this turf requires regular nitrogen applications to compete with weeds. The researchers also tested ultra-dwarf bermudagrass such as Mississippi-Supreme but found it will not work well in nonfertilized cemeteries.

Philley said the university did not receive funding for this research but saw a need to address this important question.

“We’ve had quite a bit of interest in this small experiment because very little cemetery-related research is being done elsewhere,” Philley said.

The study was conducted on MSU’s R.R. Foil Plant Science Research Center from 2003–2006.
Darren Miller was 13 when he experienced the heart-thumping, adrenaline-flowing excitement of his first squirrel hunt.

Miller, manager of Southern Environmental Research for Weyerhaeuser Co., said he has good memories of the first time his father took him squirrel hunting. Now a father himself, Miller enjoys taking his daughters hunting.

“For me, hunting provides a natural connection to the outdoors that is often lost in our everyday lives,” Miller said. “I get great personal satisfaction from every aspect of the hunt — preparing for the hunt, being in the woods, seeing and interacting with wildlife, and, when everything works out, enjoying success.”

Miller is not alone in his desire to connect with the natural world. According to a 2006 U.S. Fish and Wildlife Service report, more than 87 million people participated in wildlife-associated recreational activities. Hunting and fishing, however, are declining in the United States.

“More urban populations seem to be disconnected from the land,” Miller said. “Also, people have a lot of misconceptions about the value hunting and fishing has on the economy, and on wildlife management and conservation.”

Mississippi’s economy gets a significant boost from hunting, fishing and wildlife-related recreation. Half of the state’s citizens and many people from other states enjoy these activities in Mississippi.

Recent research conducted by MSU Forest and Wildlife Research Center scientists found that wildlife recreation contributes about $2.8 billion to the Mississippi economy each year. The study found that hunting, fishing and wildlife-related recre-
Outdoor activities create more than 66,000 full- and part-time jobs that pay more than $1.15 billion in wages and salaries.

“Economic activity and resulting impacts are measured by four statistics: output, jobs, income and value added, or the value of sales minus the costs of production,” said Steve Grado, natural resource economist in the MSU Department of Forestry.

“Hunting generates the largest output at $1.18 billion, while fishing and wildlife watching generate $773 million and $829 million, respectively.”

Based on 2006 expenditures, the most recent available, the study used a computerized database and modeling system to construct regional economic accounts.

“We evaluated the impacts of four subcategories of hunting: white-tailed deer, waterfowl, turkey and small-game, which includes dove, quail, woodcock, rabbit, squirrel and raccoon,” Grado said. “White-tailed-deer hunting produced the largest economic impact at more than $860 million, followed by waterfowl hunting at $192 million and turkey hunting at $90 million.”

The research, which was conducted by Grado, assistant Extension professor James Henderson, professor Ian Munn, and associate Extension professor Daryl Jones, also found that both freshwater and saltwater fishing create a significant impact.

Freshwater fishing created a total economic impact of $727 million. Saltwater angling accounted for more than $46 million.

“These economic contributions, made primarily by those participating in the sport, provide for the management and conservation of wildlife,” Miller said. “The majority of funding for wildlife conservation, through the Federal Aid in Wildlife Restoration Act, is derived from an excise tax on hunting equipment, firearms and ammunition. This is in addition to revenue from license sales and other hunter-dependent funds, such as duck stamps.”

Passed by Congress in 1937, the Federal Aid in Wildlife Restoration Act, commonly called the Pittman-Robertson Act, provides federal aid to states for wildlife management and restoration. It has funded projects aimed at improving wildlife habitat, introduction of wildlife, conducting research and educating hunters.

Since its inception, the Pittman-Robertson Act has generated more than $2 billion in federal excise taxes, which have been matched by more than $500 million in state funds for wildlife restoration. The state funds are raised primarily through fees for hunting licenses.

“Hunters are actually improving wildlife habitat when they purchase equipment and licenses,” Miller said. “Hunters and fishermen also are more likely to be involved in conservation organizations.”

In fact, a recent nationwide telephone poll conducted by Ducks Unlimited found that hunters were three times as likely as nonhunters to participate in organized wildlife conservation efforts.

“Organizations like the National Wild Turkey Federation, Ducks Unlimited and the Rocky Mountain Elk Foundation have conserved millions of acres of habitat and raised millions of dollars for wildlife conservation,” Miller said.

Hunting has proven to be an effective tool for managing wildlife populations. Overabundant wildlife can cause numerous problems, such as spreading diseases, endangering and threatening plants, and causing wildlife damage issues such as deer-and-vehicle collisions and black bear raids on garbage cans.

The economic impacts and wildlife conservation benefits gained from hunting and fishing are good for all Mississippians, not just the sportsmen.

Although firearms users and archery enthusiasts finance the Pittman-Robertson Act, the law benefits anyone who enjoys wildlife pastimes such as bird-watching and nature photography, according to the U.S. Fish and Wildlife Service. Recent estimates indicate about 70 percent of the people using wilderness areas are not hunting, and in some places, the percentage may be as high as 95 percent.

“Hunting benefits all species of wildlife, their habitat and the nonhunting public who enjoy wild things and wild places. I take my children hunting so they will learn that we are an integral part of the natural world and to fully appreciate the gift of healthy wildlife populations.”

DARREN MILLER
MISSISSIPPI LANDMARKS

By Linda Breazeale

Mississippi’s rivers and Gulf waters are popular fishing destinations, but most of the state’s anglers depend on ponds and lakes for their prized catches and quality time in the outdoors.

Unlike the larger bodies of water, ponds and lakes need a human touch to stock them and monitor environmental conditions for the best results.

Chickasaw County Extension Director Scott Cagle said his office gets calls almost year-round from residents with farm-pond concerns.

“From April through October, we get at least one call a week from people wanting to know how to improve their ponds. They want more fish, bigger fish and fewer weeds,” he said. “They usually don’t think about working on their pond until there is a problem.”

Cagle said he usually makes a site visit to determine the actual cause of the problem.

“General statements like, ‘My pond has moss,’ are not specific enough and may not be accurate. What they call moss may actually be some type of weed or algae,” he said. “The treatment may be different from one plant to another.”

One 2009 call came from Myra “Skeeter” Collins, director at Camp Tik-A-Witha with the Girl Scouts Heart of the South organization. The camp lake, used for swimming, canoeing and other recreational activities, was almost unusable because of a variety of weeds and algae.

“We had an almost solid-green sheet across the water’s surface, leaving very little space for swimming,” Collins said. “Grass and weeds were growing up from the bottom, and snakes were becoming a serious issue for the first time, especially near the pier. We needed to do something or close the swimming area.”

Cagle determined Southern naiad to be one of the lake’s biggest problems, along with several other plant varieties. He recommended 400 grass carp, which cost about $5 each, as an appropriate biological way to clean up and maintain the 20-acre lake. Several groups agreed to contribute to the project to support the Girl Scout camp, including the Chickasaw County Soil and Water Conservation District, the Mississippi Homemaker Volunteers and the fish supplier.

“Grass carp are not a cure-all, but in this case, they were ideal,” Cagle said. “More grass carp are needed for severe lake problems, so we recommend stocking at a 20-carp-per-acre ratio. For simple maintenance, 10 carp per acre will do the job. After a few years, new carp need to be brought in because they are not effective when they get large.”

Collins said she could see a vast improvement within a couple of weeks.

“We put the carp in the lake in September and by the time we resumed programming in March, the lake was completely clean,” she said.

Cagle cautioned that the fertility of a lake should not be taken for granted. Extension offices accept water and soil samples to test for fertility.

“Pond managers should watch out for over-the-counter fertilizer products,” he said. “Stocking rates are another issue that can impact the quality of fish.”

Two publications that are available online at http://msuces.com/pubs/ or through county Extension offices are “Managing Mississippi Farm Ponds and Small Lakes” (Publication 1428) and “Aquatic Weed Control Using Grass Carp” (Information Sheet 1556).
Well-kept yards and gardens require seasonal maintenance, a task that Mississippi State University horticulturists have simplified with a new online instructional video series.

The series, “Gardening through the Seasons,” addresses gardening tasks to be done at different times of the year. Each video is about five minutes long and features MSU horticulturists demonstrating techniques, examples and problem solving.

MSU’s Office of Agricultural Communications produces the videos, which are posted monthly. Twenty-eight of them are already online, and more are on the way. Visit http://msucares.com and click on “Lawn & Gardens.” Other online sources are the YouTube and Facebook social networks. Visit http://msucares.com and click on the YouTube or Facebook icon.

“As horticulturists, we all get similar types of gardening questions when the seasons change,” said Lelia Kelly, consumer horticulturist with the MSU Extension Service. “During our discussions about starting this series, we decided to use a seasonal theme so people could see what to do in the garden by the month.”

Horticulturists also wanted to take advantage of current communication trends to reach new gardeners. Young people often talk to each other by texting with cell phones and downloading information into a personal digital assistant (PDA). They also have multiple commitments placed on their time in juggling children and professional careers.

“We wanted to be more innovative with our Extension outreach,” Kelly said. “We targeted younger people — those starting out with their first home or yard — because many of them cannot come to Extension meetings we normally schedule.”

As more consumers of all ages develop computer savvy, many turn to the Internet as their primary information source. Posting the videos on MSUcares.com allows immediate access with a home computer and Internet connection. It also makes the information portable because consumers can download video files to a PDA.

Noting the favorable response from their clientele, several county Extension offices requested MSU Agricultural Communications to issue a DVD of the videos produced in 2009 to supplement workshops, programming and long-distance learning.

“These videos have been marketed through different distribution channels, and the formats have provided a quick reference point when needed,” Kelly said. “We can cater to clientele who use different sources to find information.”

Kelly pitched the idea of using MSU as the main location for many of the videos because of the renowned beauty of the campus grounds. She and Rob Rice, interim head of MSU Campus Landscape, worked out the logistics.

“We don’t have many gardening situations on campus that are too extreme or out-of-touch with mainstream consumers,” Rice said. “We have the same goals and challenges on campus that many gardeners have at home, and we felt they could relate to what we do at MSU by taking the journey with us.”

There are popular spots on campus that can serve as good focal points for the videos, such as the rose garden on the North Farm and the gardens that frame the Chapel of Memories.

“Most people enjoy roses, and the chapel garden features many types of plant materials as well as bulbs and annuals,” Rice said. “Using these areas draws in viewers and also highlights the beauty of the MSU campus.”

Just like plants in springtime, the videos continue to grow.

“One of our goals was to build a library of timeless information that gardeners could access at any given point in time,” Kelly said. “Accessing this expanding body of work is just a click away.”
MSU VETERINARY STUDENTS
Travel, Volunteer
While many people spent their summer vacations relaxing on the beach, a group of MSU College of Veterinary Medicine students traveled to Central America to help animals in need.

In June, second-year CVM students Katie Cooley, Brolin Evans, Brittany Fisher, Kellie Horton and Stephanie Starling participated in a veterinary mission trip organized by the Volunteers for Intercultural and Definitive Adventures (VIDA).

VIDA partners with volunteers to provide owner education, free spay/neuter surgeries and basic veterinary care to pets and livestock in remote and isolated communities. The VIDA veterinary program is open to all preveterinary and veterinary students, as well as those who have an interest in animal welfare and care.

“We found out about the program through some veterinary students at the University of Pennsylvania,” said Starling of Live Oak, Fla. “They needed some additional vet students to complete a group for their two-week mission trip to Costa Rica and Panama. We all thought it would be a good opportunity.”

The five CVM students used personal funds and raised additional money to pay for the trip. CVM also provided some funding for the students’ travel expenses. Dr. Robert Cooper, CVM’s associate dean and chief operating officer, helped the students procure the extra funding.

“We have a limited amount set aside that we periodically provide to students who are involved in these types of trips,” Cooper said. “We want to encourage students to stretch their wings and take advantage of learning and volunteer opportunities.”

The five CVM students first traveled to Costa Rica, where they immediately started treating animals. The free clinic was held in a church, and community members lined up for free veterinary services.

“The line was out the door and down the street. Seeing how many animals needed to be treated was overwhelming,” said Evans of Cartersville, Ga. “We observed veterinarians perform spay/neuter surgeries on the first day. The next day, we were doing the surgeries ourselves. From then on, we each did about five or six surgeries a day.”

Three Costa Rican veterinarians instructed and supervised while the students performed the intake, exams, vaccinations, deworming procedures and surgeries. In just 12 days, the student volunteers performed 93 spay/neuter surgeries and provided 163 vaccinations to cats, dogs, cows, pigs and horses.

“We are glad we got the chance to learn how to perform spay/neuter surgeries,” Starling said. “That is something we learn in our second year, so we are now a little ahead of the curve.”

The volunteers learned to provide quality veterinary care under pressure and in less than ideal conditions.

“We learned how to handle unique situations with limited resources,” Evans said. “In Panama, we were doing surgeries in extreme heat on a basketball court with people on the bleachers watching.”

The volunteers also learned about hardships faced in rural Central American communities.

“There is such a huge need for veterinary care in the villages we volunteered in, and people were so thankful for the services we offered. One woman offered me an avocado for taking care of her dog,” Evans said. “It was rewarding to be able to provide care for the animals and help those rural communities.”

Before setting out, Starling and the other student volunteers collected pet supply donations, such as leashes, collars and flea treatments, to provide pet owners during their trip.

“People there did not have the basics needed for taking care of their animals,” Starling said. “Some people were walking their dogs with shoe strings. We were glad to be able to provide them leashes.”

The experience sparked an interest in travel and international opportunities for Starling, Evans and their fellow students.

“We decided to start a chapter of the International Veterinary Students’ Association (IVSA) here at State,” Evans said. “Having access to the IVSA network will make it even easier for other students to find opportunities abroad.”

Starling said she will encourage other students to participate in VIDA and other international volunteer trips.

“I was a little nervous before going but am so thankful I went,” Starling said. “I hope we can help more students take similar opportunities.”
Mississippi State University scientists have found a new way to turn wood into automobile parts and highly absorbent charcoal.

While wood has been used to manufacture charcoal since the early 1600s, the new technique can create charcoal and other carbon-based products with a higher absorption capacity.

Charcoal has been used widely to treat water and clean up chemicals, but the production of magnetic charcoal creates new possibilities. Magnetic charcoal is more efficient in cleaning environmentally hazardous chemicals.

The process takes advantage of nanotechnology, which involves the creation, exploration and manipulation of materials measured in nanometers, or billionths of a meter.

The unique process was developed in MSU’s Forest and Wildlife Research Center by forest products assistant professor Sheldon Shi and chemistry assistant professor Dongmao Zhang. A variety of new products are being produced including high-crystal carbon fibers, magnetic charcoal and other new carbon-based materials.

“The list of products that can be made from wood or agricultural-based materials and nanoparticles is almost unlimited,” Shi said. “We can create antiradiation materials to combat a nuclear accident or detoxification materials to assist in environmental cleanup.”

Although this technology is in an early stage of development, several studies have proven its usefulness. One possible use is filtering pigments, heavy motor oil and other additives from water. The new technique also produces wood-carbon materials that can be used in high-performance applications.

“We have found a method to use natural woody fibers, which are obtained from abundant and relatively inexpensive renewable resources, to develop carbon fibers,” Zhang said. “This could be of great benefit to the economy and the environment.”

The process uses wood and agricultural-based materials to develop a specialty natural fiber-polymer composite. The treated natural fibers can be formed into sheets or compressed into a mold.

Working with the MSU Center for Advanced Vehicular Systems, scientists have developed sheets and molded pieces that can be used by the automotive industry. Funding provided by the Department of Energy is allowing researchers to use the new materials to further develop lightweight vehicle designs.

Mississippi State’s Office of Technology Commercialization plans to license the technology to interested companies.

“There is a lot of potential for this technology,” Shi said. “From cleaning up the environment and treating water to developing automobile parts, the use of wood and other biomass with nanoparticles provides so many possibilities.”
Marketing Tool Helps State Farmers, Businesses

By Karen Templeton

Mississippi’s specialty businesses are finding a quick and easy virtual connection to consumers through a newly expanded computer-mapping tool.

MarketMaker is an Internet tool linking growers and producers with grocery stores, food processors, specialty outlets and food industry groups. The user-friendly program also makes agricultural businesses accessible to individual consumers. University of Illinois Extension developed the software to help beef producers reach potential buyers in large cities, such as Chicago. The program was a success, and other food commodity groups quickly began using it. Now in its sixth year, MarketMaker serves 16 states and the District of Columbia.

“The program generated so much interest because it is easy to use and can map food commodity buyers and sellers by location, size, specialty and even clientele,” said Ken Hood, agricultural economist with the Mississippi State University Extension Service. “It isn’t just for large farms and producers. It can help customers find organic and locally produced products, too.”

Led by Hood, Mississippi was the sixth state to join MarketMaker, and Mississippi is represented on the program’s governing board.

“MarketMaker gives our growers and producers a direct route to potential customers,” Hood said. “If you don’t have a hook, you can’t catch anything. MarketMaker gives ag businesses that hook.”

MarketMaker is a free service that allows its users to update and edit their business profiles easily and keep track of the clients they attract.

Hood said Mississippi’s participation in MarketMaker has increased the visibility of many of the state’s agricultural businesses.

“Lauren Farms, a prawn production farm in Leland, for example, is on the list of MarketMaker’s top 10 most visited sites,” Hood said. “We update the site frequently to feature individual businesses on the homepage and help direct potential customers to them.”

Bill Wooten, owner of Missiana Produce in Bruce, has experienced the benefits of the computerized marketing tool.

“Surprisingly, I received a call from a potential customer in the United Kingdom who was interested in having us ship him sweet potatoes,” Wooten said. “I’d say a program that can have that wide a draw is a benefit to us. We’ll keep using it.”

Hood said the website’s recent expansions benefit agritourism businesses, which include attractions like pick-your-own farms, petting zoos, corn mazes, and farm bed and breakfasts.

“Families can use MarketMaker to find a local pumpkin patch or a pick-your-own blueberry farm,” he said. “Customers can also find restaurants in towns they are visiting. They can click on ‘restaurants’ and enter the zip code, and a list will appear with addresses and a map so everything is easy to find.”

In the next year, MarketMaker will expand to include horticultural businesses.

“The expansion is going to have an impact on Mississippi because of our large green industry,” Hood said. “Anyone who has Web access can connect to the state’s horticulture businesses. It is going to provide many new marketing avenues for nursery growers.”

As a member of MarketMaker’s national governing board, Hood was named in a recent award given to the program by the U.S. Department of Agriculture’s National Institute of Food and Agriculture.

“The next round of expansions should also be of interest to those who buy or sell feedstock from renewable energy sources, as we are looking to add the bioenergy industry,” Hood said. “Growth is always on the horizon.”

Mississippi MarketMaker is online at http://ms.markettmaker.uiuc.edu. Contact Hood at (662) 325-2155 or hood@agecon.msstate.edu for more information.
Until recently, Jason Edmonds had not eaten beef in nearly three years. Citing concerns over animal welfare, his personal impact on the planet, and added hormones and antibiotics, Edmonds adopted a vegetarian lifestyle for years, until finding access to local farmers who share his concerns.

Now the Starkville resident is a “locavore,” or a person who chooses to eat vegetables and meat produced locally. Locavores are part of a growing movement of consumers who purchase food from local producers and who know about and have a voice in the production process.

This movement gives small farms a way to market goods directly to consumers who are willing to pay higher prices if they know exactly what they are buying.

“Information is worth money,” said Jane Parish, associate Mississippi State University Extension professor and beef cattle specialist. “People are willing to pay for it.”

These direct-selling relationships can prove profitable for farmers, according to MSU Extension Publication 2563, “Direct Marketing Beef,” which was written by Parish, along with assistant Extension professor Justin Rhinehart and assistant professor James Martin, all of the MSU Department of Animal and Dairy Science.

“Selling beef directly to consumers enables beef cattle producers to set prices that cover costs and provide profits if there are enough buyers at these price levels,” the publication explains. “Many consumers are willing to pay premiums for freezer beef from cattle producers who develop relationships with them and share information about cattle management practices.”

Farmers can be freed from the often-fluctuating fed-cattle markets by maintaining a list of customers who are waiting for animals. Farmers can thus limit their stock to their local demand.

“Many cattle producers are interested in direct marketing. It’s value-added,” Parish said. “Consumers can feel good that it’s local beef.”

Many producers already keep some of their own stock for personal use, and expanding this option to the public adds value to existing prac-
tices. Consumers can also work directly with farms to get specialty beef, such as organic, grass-fed, or hormone- and antibiotic-free, if they pay a deposit for the animal.

Buying a side of beef, however, differs from purchasing packaged meat from a grocery store. While consumers may be lured by better quality beef at wholesale prices, they must consider the amount of beef in a steer.

“When they harvest the animal, it is the whole animal,” Parish said. “It’s really important people understand how much meat they’re getting.”

A side of beef contains about 263 pounds of useable meat. A whole carcass includes a range of high- and low-priced cuts. As a rule of thumb, one cubic foot of freezer space stores about 35 to 40 pounds of cut and wrapped meat. Oddly shaped meat takes up more space.

Edmonds is sharing his side of beef with five friends, as he lacks the space to store a side on his own. The friends reserved a side for $2.45 per pound from Cackleberry Farms in Prairie, Miss.

To prepare for the beef, they spoke to older family members who had at some point bought large quantities of meat. On the Internet, they learned about uncommon cuts, aging the beef to change its flavor, and high-quality cuts that were ordinarily too expensive for them to buy.

This additional work on the consumer end is worthwhile to Edmonds, who looks forward to supporting a local business.

“Working with a local producer lets you actually put a face and a story with the food you are putting into your body,” he said. “I think we Americans have lost that connection to our food as something vital, vibrant and sustaining in our lives. When we don’t interact with those who grow our food, we lose that connection to food as history, culture and enjoyment. Food becomes more a product to be consumed than an experience.”

But Edmonds enjoys knowing more than just the production practices of farms; he also enjoys knowing who receives his money. He likes knowing that it is staying in the local economy.

He explained that smaller-scale, local farms help reduce the amount of energy required to ship food from the farm to the table, which is a major source of carbon emissions. Because he can buy it locally, he has added not only beef back to his diet but also locally produced poultry.

People interested in buying a side of beef or other local products should visit their local county Extension office or contact the Mississippi Cattlemen’s Association. In addition, the Mississippi MarketMaker website provides an interactive mapping system for locating businesses and agricultural products in Mississippi at http://ms.marketmaker.uiuc.edu/. The “Direct Marketing Beef” publication is available at http://msu-cares.com/pubs/publications/p2563.pdf.
Before oil from the Deepwater Horizon spill had even threatened the Mississippi coastline, experts from the MSU Division of Agriculture, Forestry and Veterinary Medicine were already busy at work to help Gulf Coast communities prepare for and deal with potential problems. The following pages detail some of the many ways DAFVM personnel are helping communities and wildlife.

MSU Assists Wildlife on Mississippi Beaches

A group of Mississippi State University employees reported to the Mississippi Gulf Coast to transport birds and turtles impacted by the Deepwater Horizon oil spill.

In May, Elmo Collum, an Extension associate who coordinates disaster response, received a call from the Mississippi Animal Response Team requesting assistance from the MSU Extension Service and the Mississippi Agricultural and Forestry Experiment Station.

“We were tasked with the responsibility of transporting oiled or injured wildlife from the beaches on the coast to the Wildlife Rehabilitation Center or to the Marine Institute,” Collum said.

To prepare for this duty, Mississippi State offered Extension and MAFES employees the opportunity to volunteer for training and service. These employees received Incident Command System (ICS) training, Hazmat Awareness training, and additional oil spill and animal handling training to ensure the safety of both the responders and the animals.

As an ICS team leader, Starkville resident Vivian Cade regularly responds to disasters across the state. She volunteered for the oil spill response team to encourage others to serve when able.

Cade is an Extension associate for the Department of Food
A secretive marsh bird found near the Gulf Coast could be the key to unlocking information about how the Deepwater Horizon oil spill has affected natural resources.

Since 2005, Mark Woodrey, senior research associate at MSU’s Coastal Research and Extension Center, has studied the clapper rail, a hen-like bird that hides in the dense marsh grass, making it difficult to find. Woodrey collects clapper rail population numbers to help him identify how environmental changes affect the species.

His research is important to both the Gulf Coast economy and its environment. Marsh birds make an important economic contribution to the region because bird-watchers seek out certain types of the elusive animal. Bird enthusiasts are one of the fastest-growing recreational groups in the United States, and
The Deepwater Horizon oil spill has presented Gulf seafood workers with their biggest challenge yet, but they are prepared to keep their industry afloat with all the resources they have, including their noses.

About 60 seafood workers gathered at the MSU Coastal Research and Extension Center in Biloxi to learn how to identify oil-tainted seafood by smell. The sensory evaluation exercise was part of the Harvest from Open Waters (HOW) training offered by the Mississippi-Alabama Sea Grant outreach program.

“State and federal agencies have tested shrimp, finfish, crab and oyster samples from our state waters, and all test results have indicated that the samples are not contaminated with oil,” said Dave Burrage, professor of marine resources with the MSU Extension Service. “But seafood workers want to further ensure the safety of seafood by testing at their own facilities. They are guaranteeing that their buyers are getting the best possible products.”

Woodrey collaborates with Bob Cooper of the University of Georgia on the project.

“The idea was that over the long term, we would be able to assess the effects of different kinds of disturbances on birds,” Cooper said. “Disturbances include things like climate change or, most recently, the oil spill.”

To get an accurate count, Woodrey, who is also director of the Grand Bay National Estuarine Research Reserve, encourages clapper rails to emerge from the marshes with mating calls. He plays audio recordings of the rails’ mating call, which sounds more like clicks and clatter than the song of a bird, to lure the birds from their hiding places.

“We also track fiddler crab populations,” Woodrey said. “They are the main part of their diet, and their numbers give us a sense of the bird’s population in the area.”

This past spring, the researchers also began to study the seaside sparrow, a small songbird. The studies on this species are performed only during its breeding season, which runs from March through early August.

“The oil started coming ashore in the late stages of the breeding season,” Woodrey said. “The first time we expect to see any effects from the oil spill will be when we do these studies again next year.”

Mississippi’s Gulf Coast received less oil than did Louisiana’s coastline. As a result, the effects of the spill may be subtler.

“It’s difficult to say exactly what the direct impacts are at this point,” Woodrey said. “I think there are going to be longer-term impacts that we need to be paying attention to.”

Woodrey has also helped coordinate environmental sampling for pre-spill assessment at the reserve. He has collected information on marsh fishes, submerged vegetation, water quality, oysters, diamondback terrapin nesting and periwinkle snails.

Seafood Workers Sniff for Safety

The research has relevance beyond bird-watching and economics. Because the health of the species is also a good indicator of the overall health of the marsh, changes in population numbers can indicate changes in the marsh and may help researchers identify the causes of those changes.

“State and federal agencies have tested shrimp, finfish, crab and oyster samples from our state waters, and all test results have indicated that the samples are not contaminated with oil,” said Dave Burrage, professor of marine resources with the MSU Extension Service. “But seafood workers want to further ensure the safety of seafood by testing at their own facilities. They are guaranteeing that their buyers are getting the best possible products.”

Steve Otwell, an Extension seafood specialist in the Sea Grant Program at the University of Florida Institute of Food and Agricultural Sciences, led the training. He explained how to assure the safety of seafood by following HOW guidelines.

“The first step in assuring seafood safety is to make sure it is harvested from safe, open waters,” Otwell said. “A great deal of analytical work has gone into determining open water areas, so we know the products harvested there are safe.”

Otwell said that it is highly unlikely that any oil would be found on seafood currently being harvested from waters that have been deemed safe by the federal government. Seafood workers, however, can further check their products.
“Our sense of smell is our most powerful sense,” he said. “Those working in this industry use their noses in their day-to-day business. Most fisherman and seafood producers can tell by the way the air smells if it is low or high tide.”

Otwell demonstrated how to properly smell-test seafood products by using something called the “bunny sniff.” Participants then used the technique to detect fresh, putrid, briny, sour, fishy and other scents. These sensory experiences helped the group become familiar with the types of odors they can easily distinguish.

Otwell then distributed samples of shrimp and grouper tainted with oil in concentrations as low as 5 parts per million and less. Otwell and his team spiked the samples with oil from the Deepwater Horizon spill because they could not find any contaminated samples in open waters.

“It is amazing how much the human nose can detect, even at such low levels,” Burrage said. “We know Mississippi seafood is of excellent quality, but we are thankful for this extra layer of protection because it can help reestablish consumer confidence.”

Seafood workers participated because they wanted new tools to help them keep their businesses going in spite of the oil spill fallout.

Snip McLendon, plant manager for M&M Processing in Biloxi, said he has been using the sniffing technique in his plant for years, but the training provided him with extra knowledge.

“I think it has helped me become even more familiar with what we should be looking for,” he said. “Also, I am thankful to get more information on the protocol for harvesting in open waters. We’ve been hit with a lot of information since the oil spilled occurred, and it is good to have a training like this to help us keep current with the regulations.”
When the Deepwater Horizon well began spewing oil into the Gulf of Mexico in April, Mississippi State was called in to help monitor damages to the state’s fisheries, seafood, tourism and recreational industries.

Ben Posadas, an Extension and Mississippi Agricultural and Forestry Experiment Station economist, is an expert in fisheries economics, environmental valuation and economic recovery. The Mississippi Department of Marine Resources asked him to represent the department at the NOAA Technical Working Group on Human Use Impacts of the Gulf of Mexico Oil Spill, which began daily monitoring of human uses of the Gulf states’ marine resources in May.

Posadas was also named to the Mississippi Research Consortium Oil Spill Economics Team, which is made up of faculty members from MSU, the University of Mississippi, Jackson State University and the University of Southern Mississippi. This group, formed by the Mississippi Governor’s Office through the Institutions of Higher Learning, is developing an oil spill research and educational plan. Posadas is also participating in a Gulf-wide multistate task force. The group is conducting an inventory of economic sectors affected by the oil spill and compiling long-term baseline economic information about these sectors.

Posadas said the oil spill economic assessment efforts can be classified in two categories.

“First you have the assessment of the economic impacts to the affected economic sectors, primarily commercial fishing and the seafood industry,” Posadas said. “On the other side, there are damages to the state’s and the region’s natural resources.”

Information MSU had already gathered on the status of the state’s fisheries, seafood, tourism and recreational industries before the oil spill will be valuable in the long-term recovery from the damages caused by this disaster.

Dave Burrage, MSU Extension marine resources specialist, commented on the importance of the data.

“This information being collected will be used in different ways by these various groups,” he said.
When the Deepwater Horizon oil spill closed fisheries along the Gulf Coast and seriously impacted the seafood industry, MSU Extension Service personnel worked extensively to assist those affected.

Dave Burrage, Extension marine resource specialist, and Peter Nguyen, an Extension fisheries technician, were on the front line.

A large number of the fishermen along the Mississippi coast are Vietnamese-Americans, and many speak very little English. Nguyen, who is fluent in Vietnamese and English, served as interpreter for these fishermen. He helped many gain employment with BP during the cleanup operations and provided information, attended meetings and translated material into Vietnamese. The Extension Service also has general information on surviving difficult economic times, and Nguyen translated it into Vietnamese, as well.

“I worked very closely with the fishermen, translating, providing information, attending meetings and assisting in special equipment purchases,” Nguyen said. “If there was something they needed or did not know, they came to me.”

Phat Le, a Vietnamese-American fisherman, said Nguyen was willing to help with anything his fellow fishermen needed.

“If Peter had not been here, many of us would not have been able to continue working,” Le said.

In October, Nguyen was asked to accept the Ruth Fertel Keeper of the Flame Award on behalf of the Vietnamese-American fishing community of the Gulf Coast. The award, presented at the Southern Foodways Alliance Symposium, was given for keeping a Southern food tradition alive.

Burrrage also works with the Gulf Coast fishing community to keep this population informed of important issues. While the oil disaster was ongoing, experts held meetings at the Mississippi Gulf Coast Coliseum in Biloxi and the Mobile Civic Center to provide the public with the most accurate information available on the spill.

“We made sure that the underserved populations knew what resources were available to them and that the coastal population got the best information that was available without sensationalism,” Burrage said.
Mississippi row-crop producers are facing a growing problem, as five common weeds have developed resistance to the primary herbicide used to manage them.

Roundup is the trade name for glyphosate, a powerful broad-spectrum herbicide that can kill a wide range of weeds in various growth stages. But by the 2010 growing season, 19 weeds worldwide had become resistant to glyphosate. Five of these weeds are found in Mississippi: horseweed, Italian ryegrass, Johnsongrass, Palmer amaranth and waterhemp.

Crops genetically modified to be resistant to glyphosate were first marketed in 1996. Known as Roundup Ready seed, it allowed producers to apply glyphosate across a field, killing weeds but leaving the crop undamaged.

Tom Eubank, a Mississippi Agricultural and Forestry Experiment Station soybean weed scientist, said that before Roundup Ready crops were developed, weed control was accomplished primarily with residual herbicides and tillage.

“These are soil-applied herbicides that, upon activation by rainfall, prevent weeds from emerging,” Eubank said. “Most of the time, they were applied either just before or at planting.”

A few postemergence herbicides were also available, and these controlled weeds that emerged during the growing season.

“Total postemergence weed programs were not extremely effective before Roundup Ready cropping systems,” Eubank said. “With a total post program, you spray a group of weeds, and while you may control those, an immediate flush of more weeds usually occurs after a rainfall. You’re also limited on how many treatments you can make in a season.”

When Roundup Ready seed was introduced, the technology revolutionized production practices.

“Producers did not have to rely on tillage and residual chemistries to control weeds. They could delay treatments and wait until the weeds got a little size on them. They could make two to three applications of Roundup per season, and the fields would be clean,” Eubank said.

But those good days didn’t last long. Glyphosate resistance was documented in horseweed in Delaware in 2000 and Mississippi in 2003. Palmer amaranth was found to be resistant in
Mississippi is one of six states participating in a study monitoring the problem of glyphosate-resistant weeds and trying to prevent any more from developing.

David Shaw, MSU vice president for research and economic development, is on a research team with scientists from five other universities performing a benchmark study of glyphosate resistance management.

The study is assessing the sustainability of Roundup Ready technology for weed management in U.S. crops. The team is working to improve the sustainability of weed control systems and to prevent the development of more herbicide-resistant weeds.

“The information gathered from this research study will provide university scientists with valuable data to develop and tailor effective strategies and outreach programs to improve sustained weed control in the Roundup Ready technology,” Shaw said.

Starting about five years ago, researchers gathered information from about 1,200 producers in Mississippi, North Carolina, Nebraska, Illinois, Indiana and Iowa.

“The growers from these states represent the major Roundup-Ready-crop-growing regions of the United States and provide diversity in environments, cropping systems and weed populations,” Shaw said.

They established test plots on about 150 of these growers’ fields. On half of each plot, growers continue their current weed management programs. On the other half, growers follow recommendations from their university weed specialists.

“Scientists collect field data and soil samples each year to determine the impact of the two weed management programs on weed populations, weed species diversity, weed seed bank, crop yields and economic returns,” Shaw said. “The results of this study will provide valuable data to determine the sustainability and profitability of current growers’ weed management programs compared to more diversified programs designed to lower the potential risk of selecting for weeds resistant to glyphosate.”

2005 in Georgia and 2008 in Mississippi. Mississippi also had glyphosate-resistant horseweed and Italian ryegrass by 2005 and then resistant water-hemp in 2010.

John Byrd, a weed scientist with the MSU Extension Service, said producers made a mistake by switching to the almost exclusive use of one chemical for weed control in every row crop but rice.

“Anytime you rely solely on one herbicide or one group of related herbicides, then you’re going to naturally select for those individual weeds in the population that have tolerance to that specific herbicide,” Byrd said. “Some plants will survive and produce seeds with similar resistance.”

Byrd said glyphosate is not the only herbicide to which plants have developed a resistance. Certain weeds are resistant to atrazine and 2,4-D, for example.

“There is no perfect herbicide that controls every weed 100 percent of the time,” Byrd said.

In the past, producers scouted during the growing season to determine what weeds were present in their fields. They calculated the chemicals and quantities needed to control these weeds and sprayed this mixture on their own fields.

“They had to come up with a recipe — a little bit of this and a little bit of that — to control what was out there. But with Roundup, you put it in the tank, and it controlled pretty much all of what was out there,” Byrd said.

Glyphosate’s effectiveness transformed a practice that used to be very complex into almost a one-step process.

“Weed control is a little bit like war,” Byrd said. “The more variety you have in your artillery, the more successful you’re going to be at winning that war.”

Byrd said the key to managing resistance is to rotate the use of herbicides that have different modes of action — ways the chemicals kill weeds.

“Only by following that strategy will a farm be able to ensure that resistant populations don’t develop on their property,” Byrd said.

LibertyLink is a new herbicide-resistant crop technology that has been available for cotton since 2004 and soybeans since 2009. The herbicide used in LinberyLink crops is Ignite, a broad-spectrum herbicide that controls a wide range of weed species, and it is effective on some weeds that Roundup had difficulty with.

“I hope we can take the lessons we learned with the Roundup systems and not go down that path with the LibertyLink systems,” Eubank said.
Lori Ramsey Massey of Latimer carefully prunes her grandmother’s chaste tree. Her grandmother’s tree was one of the most admired in the community. (Photo by Kemberly Groue)
Vera Ramsey’s yard in the St. Martin community was full of amaryllis, daylilies and azaleas, but she was most known for her chaste tree full of beautiful lilac blooms.

“For years, she had the only known chaste tree on that side of the bay,” said Ramsey’s granddaughter, Lori Ramsey Massey of Latimer. “So many people would stop and admire what they called the ‘lilac tree.’ They’d always ask for a cutting.”

Ramsey generously provided cuttings of her other plants to those in her community, but she preserved the branches of her chaste tree for fear the tree would end up looking bald.

“One day, my grandmother allowed a young man to take the trimmings after she had pruned the tree,” Massey said. “He worked for Frazier’s Nursery in Biloxi and took the cuttings to root and start the nursery’s own stock of chaste trees.”

Soon, chaste trees began growing throughout Jackson County and other parts of Mississippi’s Gulf Coast.

“I cannot say for certain that all the trees came from my grandmother’s tree, but it is really something to see them growing everywhere,” Massey said. “They are even grown in the medians in Ocean Springs.”

Hurricane Katrina destroyed much of the property in Ramsey’s beloved community, including her own home. But her chaste tree survived and is still there today.

“I’m so glad she shared cuttings with us so we all have our own trees,” Massey said. “The storm messed up a lot of things for a lot of people, and it just means so much to keep that tree alive. It helps us remember the good times.”

Gary Bachman, an assistant Extension professor of horticulture at the Mississippi State University Coastal Research and Extension Center in Biloxi, writes the weekly Southern Gardening column. His column on chaste trees ran on the same day and in the same newspaper as Ramsey’s obituary notice.

“Cuttings can be taken from the stems and branches. It is best to cut at a slant where the tissue has not yet turned woody,” Bachman said. “The most important thing is not to let it dry out.”

Bachman said to dip cuttings in a rooting hormone, plant them in a pot or box with peat potting mix and keep them watered.

“I suggest placing a clear, plastic bag over the pot to trap the moisture and keeping it in a shady area. Another useful technique is planting it in a sandbox and placing a glass jar over the cutting,” Bachman said. “Once the roots initialize, it can be transferred into a garden or landscape.”

Bachman said the propagated plant is more than just related to the plant or tree from which it originated.

“The cool thing is that when you propagate a plant, you end up with the same plant,” he said. “It is a clone — identical to the original plant or tree.”

Massey said she and her family proudly grow her grandmother’s chaste trees.

“The chaste tree has been a wonderful symbol in our family,” she said. “To honor her love for that tree, many of us wore lilac or purple to her funeral.”

Information about propagating plants for gardens or landscapes can be found in the MSU Extension publication “Propagating Plants for the Home Landscape” at http://msucare.com/pubs/infosheets/is0207.pdf.

Bachman’s column can be found online at http://msucare.com/news/print/sgnews/.
The cotton picker is significant to the county because International Harvester’s mechanical pickers research conducted in 1940s on the Hobson Plantation. Pictured is an early cotton picker currently on display at the plantation. (Photo by Bob Ratliff)

County Seat: Clarksdale
Population: 26,936
Municipalities: Clarksdale, Coahoma, Friars Point, Jonestown, Lula, Lyon
Commodities: Cotton, Corn, Rice, Soybeans
Industries: Infolab, Safe-t-Cart, Drumheller Packing, KBH, Delta Oil Mill, Cooper Tire
Natural Resources: Mississippi River, Fertile Soil
History Notes: Coahoma County was established Feb. 9, 1836, and is located in the northwestern part of the state in the fertile Yazoo Delta region. The name “Coahoma” is a Choctaw word meaning “red panther.”

Did you know? The first mechanical cotton picker brought to Mississippi was located at Hopson Plantation, and the world’s first franchised Holiday Inn was in Clarksdale.

“Coahoma County, bordering the western side of the state, is home of some of the most fertile soil in the world. Fields of ‘white gold’ stretch along the Mississippi River and provide special beauty during this time of harvest.”

Don Respess, Sr., Extension County Director

Editors note: 1/82 is a regular feature highlighting one of Mississippi’s 82 counties.
The Coastal Research and Extension Center (CREC) can trace its beginnings to 1970, when it was known as the Mississippi Sea-Grant Advisory Service. From those humble beginnings, CREC received its current name in 1988 and has grown to include experiment stations in Pearl River, Perry, Harrison and Jackson counties, as well as a partnership in the Grand Bay National Estuarine Research Reserve in Jackson County.

CREC has Extension offices located in 21 southeastern counties. One key Extension component is the Crosby Arboretum, an internationally recognized native plant conservatory. Research programs cover areas including forestry, entomology, ornithology, economics, food safety, agronomic crops, environmental ecology, systems engineering, the Center for Urban Rural Interface Studies, beef cattle and forages, and ornamental and vegetable horticulture.

Teamwork between the Mississippi Agricultural and Forestry Experiment Station and the MSU Extension Service is one of CREC’s strengths and is evident through the programming collaborations common among Extension agents, specialists and researchers. Marine Extension is still a focus area for Coastal and has been in the spotlight since the fishery industry was impacted by the Deepwater Horizon oil spill.

CREC’s largest faculty concentration is in horticulture. Ornamental horticulture research began in the early 1970s under the direction of Sam Laiche at the South Mississippi Branch Experiment Station in Poplarville. This station recently hosted a successful 37th Annual Horticulture Field Day with participants from Mississippi, Louisiana and Alabama. Research topics included propagation, fertilization, irrigation, mechanization, weed control, niche vegetable production, high-tunnel production, essential oil production, plant selection and evaluation, and improvements in production efficiency and safety. Currently, five faculty members dedicate some portion of their effort to the program and have excellent collaborative relationships with other universities across the country.

Ornamental horticulture has been one of the most successful agricultural sectors in recent years, and its outlook is positive. However, it has been impacted by both drought and recession. Many of our producers marketed products in Birmingham and Atlanta and along the Atlantic seaboard. Many of those areas saw devastating water restrictions due to drought. With landscape professionals and homeowners unable to irrigate lawns and landscapes, sales of landscape plants declined. As drought restrictions eased, the recession impacted the ornamental industry. Gardeners saw a decline in their available disposable income for aesthetic plant purchases.

While ornamental horticulture has not been recession-proof, it is still a multibillion-dollar industry for the United States. Buyers have become more interested in sustainable and edible landscaping. Nurseries have reported adding drought-resistant or edible plants to their catalogs. Color annuals and perennials crops remain a staple. With less money to spend, buyers look for the maximum impact for their money.

County Extension offices report that they are fielding more calls about home fruit and vegetable production and preservation as people have a renewed interest in growing their own food. Programs on small-space vegetables gardening and even rain barrels are in demand.

According to the 2007 Census of Agriculture, Mississippi has 861 greenhouse, nursery and floriculture operations. Most of these operations would best be described as small family farms with employment ranging from one to 28 permanent workers and one to 33 part-time workers. As a whole, the Mississippi “green” industry has created 14,236 jobs and has an economic impact of $997 million.

Like all of Mississippi agriculture, ornamental horticulture in this state is resilient. Our producers will continue to be recognized as innovators and leaders.
CVM Department Head to Review Federal Grants

A department head in the MSU College of Veterinary Medicine has been selected to review research grants for the National Institutes of Health.

Dr. Stephen Pruett, head of the CVM Department of Basic Sciences, is one of a select group of scientists serving as members of NIH’s Innate Immunity and Inflammation Study Section. Members are selected for their achievements in their disciplines, research accomplishments and publications in scientific journals.

As a member of this group, Pruett will review research grants submitted to NIH by scientists from all over the country.

Membership on a study section requires a commitment of time and energy but provides a unique opportunity to contribute to the national biomedical research effort, said Dr. Toni Scarpa, director of the NIH Center for Scientific Review.

“Mature judgment, objectivity and the ability to work effectively in a group is needed to participate in a study section,” Scarpa said. “These are all qualities we believe Dr. Pruett will bring to this important task.”

Steeby Named Professor Emeritus

Jim Steeby has been named associate Extension professor emeritus in the Department of Wildlife, Fisheries and Aquaculture.

Steeby will continue his association with MSU’s Thad Cochran National Warmwater Aquaculture Center (NWAC) in Stoneville and the Humphreys County Extension Office.

“Jim had a long and productive career at MSU and had a significant impact on the state’s catfish industry. We are pleased that he was awarded this distinction because emeritus status recognizes his contributions and means he will remain a valuable resource for the university and the state of Mississippi,” said Craig Tucker, NWAC director.

Steeby worked with the aquaculture program at the MSU Delta Research and Extension Center for 28 years. He retired in July 2010 from his position as Extension aquaculture specialist in Belzoni.

The U.S. Aquaculture Society presented Steeby with its 2010 Distinguished Service Award for his contributions to the catfish industry. Each April, he portrays Cap’n Catfish at Belzoni’s catfish festival.

Hunt Receives National Advising Honors

Kevin M. Hunt, associate professor in the Department of Wildlife, Fisheries and Aquaculture, is one of the 2010 winners of recognitions given by the National Academic Advising Association (NACADA). He is receiving a citation in the Outstanding Academic Advising Award/Faculty Category.

Hunt advanced to national competition after selections during the spring semester for MSU’s Irvin Atly Jefcoat Excellence in Advising Awards.

With offices in Manhattan, Kan., NACADA represents nearly 10,000 members spread among 10 regional conferences. In addition to faculty and professional advisers, such as Hunt, the 31-year-old association includes administrators, counselors and others in academic and student affairs departments.

Since the NACADA awards program was established in the early 1980s, MSU faculty and staff members consistently have been among those receiving top honors.

MSU Forestry Professor, Administrator Receives High Honor

Andrew W. Ezell, head of the MSU Department of Forestry, has been named a Fellow of the Society of American Foresters for his contributions to the professional organization and the nation’s forest industry.

An expert in hardwood management and growth, Ezell has served the land-grant university for 25 years as an Extension specialist and professor. Most recently, he was named to lead the
state’s only four-year academic program in forestry. Ezell, a Linden, Tenn., native, holds a bachelor’s degree in forest management from the University of Tennessee, a master’s in forest ecology from Yale University and a doctorate in forest management and wood quality from Louisiana State University.

“Dr. Ezell does an excellent job of informing different groups about hardwoods, forest herbicides and their effect on invasive woody species,” said George Hopper, dean of the College of Forest Resources. “He is a nationally acclaimed expert in the culture and management of hardwood forests and a highly respected forester.”

**Forest Landowners Award MSU Extension Professor**

The Forest Landowners Association has named MSU forest management specialist Stephen Dicke as Extension Forester of the Year. A certified arborist and tree farm inspector, Dicke was praised in the nomination for his intensive work in the wake of Hurricane Katrina. Dicke led an educational effort to help landowners determine casualty losses, develop management and recovery strategies, and assist with urban tree losses along the Mississippi Coast.

“Dr. Dicke organized 40 programs for more than 2,400 participants in the aftermath of Hurricane Katrina,” said Andrew Ezell, MSU forestry department head. “His educational materials were not only used throughout south Mississippi, but also by his Louisiana and Texas colleagues, who were also recovering from the damage of hurricanes Katrina and Rita.”

Dicke was praised for his consistent productivity. Over the last four years, Dicke has conducted 297 programs for nearly 12,000 participants who represent more than 2.4 million acres of forestland. He also has authored or coauthored 49 publications and secured almost $1.5 million in outside funds.

“His work to improve the lives of private forest landowners and forestry in Mississippi and the Western Gulf Region is exemplary,” Ezell said. “Dr. Dicke is an exceptional faculty member, active in professional organizations and community service.”

**Jackson Named MSU Extension Director**

An administrator with more than 25 years of experience in agricultural education has been named director of the MSU Extension Service. Gary Brown Jackson will assume his duties as head of the statewide educational outreach system Jan. 1, 2011.

“Dr. Jackson’s experience and dedication to higher education make him an excellent choice for leader of the MSU Extension Service’s educational outreach to all Mississippians,” said Greg Bohach, vice president of the Division of Agriculture, Forestry and Veterinary Medicine. “In addition, Dr. Jackson has established excellent relationships with colleagues at other educational institutions and government agencies, as well as Mississippians engaged in all types of agricultural enterprises.”

Jackson earned bachelor’s and master’s degrees in agricultural and extension education at Mississippi State. He holds a doctorate from Pennsylvania State University, with a major in agricultural education and a minor in communication.

Jackson began his professional career as an agricultural educator for the Starkville School District. He has been a member of the College of Agriculture and Life Sciences faculty since 1990 and has served as assistant and associate dean of the college, as well as director of the School of Human Sciences and interim state leader for Extension’s Family and Consumer Sciences program.

In 2010, he assumed the duties of interim associate vice president of academic affairs in the Office of the Provost and Executive Vice President at MSU.

“Dr. Jackson’s variety of administrative roles and a record of teaching innovations are valuable assets as he leads Extension professionals and support staff in continuing a tradition of adapting new technology and methods for statewide educational programs,” said MSU President Mark Keenum.
Long after Jacquelyn P. Deeds retires from Mississippi State University, she will continue to contribute to the university and impact its students in a special way. A gift from Deeds has created an endowed scholarship that will help ensure others are drawn into teaching as a career.

As a professor of agricultural information science and education, Deeds has spent the majority of her academic career in higher education, shaping the minds of students. By funding a scholarship in the College of Agriculture and Life Sciences and including Mississippi State University in her will, she hopes to inspire others to follow her into what she feels is a rewarding career.

Deeds holds teaching close to her heart, and she has never regretted her decision to remain hands-on with academics. She also understands firsthand the financial burden a college degree can impose on some students and their families.

“Over the years, I’ve seen many of my students struggle to work more than one job, study and have a home life,” she said. “So, I believe giving them the financial edge of a scholarship will help them excel in academics.”

Deeds, who has been an MSU faculty member since 1985, teaches undergraduate and graduate courses in the School of Human Sciences. She also coordinates student and beginning teacher programs, as well as supervises student teaching and field experiences.

A native of Oregon, Deeds grew up just outside of Drain, near Eugene. She began her education in a small community elementary school and would eventually become the first woman to teach high school agriculture in her home state.

During her formative years, Future Farmers of America played a positive role in her life. Early on, the organization, which later became National FFA, provided Deeds with opportunities to learn outside of the classroom.

A professional highlight of Deeds’ career was being named to the National FFA’s board of directors. In that role, she represented all institutions of higher learning involved in agricultural education.
“When I attended FFA conventions, I witnessed many of my students walk across the stage with their own students to receive recognition for their efforts,” Deeds said. “Naturally, I felt like a proud grandparent.”

Deeds earned bachelor’s and master’s degrees in agricultural education from Oregon State University. She obtained her doctorate in agricultural education at The Ohio State University in 1985 before joining the Mississippi State faculty.

MSU held promise for Deeds since the university was already nationally recognized as a solid land-grant institution. Furthermore, MSU had a doctoral program that enabled Deeds to research and publish with graduate students.

“I have had the opportunity to teach most of the high school agriculture teachers in Mississippi either as undergraduate or graduate students,” she said. “Since my whole career has been academic-based, it makes sense to me to promote teaching agriculture as a career to others.”

The Dr. Jacquelyn Deeds Endowed Scholarship in the School of Human Sciences at Mississippi State will assist full-time undergraduate students majoring in agricultural information sciences. Recipients will be students who intend to teach in secondary education.

“Future recipients of the scholarship may never know me personally, but I believe they will appreciate my memory and my desire to do this very personal thing,” Deeds said.

As with many agriculture teachers, Deeds has a genuine love of animals and has collected some 200 pieces of pig memorabilia through the years.

“I've never seen an unhappy pig, so I guess that's what began the long love affair,” she said.

She’s even incorporated her affection for pigs into her teaching philosophy with the use of the slogan, “Leadership is when PIGS fly!” Deeds coined the acronym PIGS: P stands for passion; I, integrity in all things; G, growth in your profession; and S, service to others.

Over the course of her career, Deeds has held a number of leadership roles. She has served as president of the American Association of Agricultural Education and president of the Mississippi Business and Professional Women’s Organization. She remains active with the American Association for Agricultural Education and has served on the National Council for Agricultural Education.

A fondness for MSU has led Deeds to inspire others through her philanthropy. She hopes individuals will consider leaving their own legacy at MSU through the College of Agriculture and Life Sciences.

The Dr. Jacquelyn Deeds Endowed Scholarship in the School of Human Sciences is an open fund in the MSU Foundation that may benefit from additional contributions.
It’s all in the name. Check it out for news and information from the Division of Agriculture, Forestry and Veterinary Medicine.