



2005 HIGHLIGHTS

Accomplishing the Mission



Alabama Cooperative Extension System



Alabama A&M and Auburn Universities

ALABAMA COOPERATIVE EXTENSION SYSTEM 2005 HIGHLIGHTS

Accomplishing the Mission

Greetings to the friends of Extension!

Most of you already know a great deal about the Alabama Cooperative Extension System. But our programs are so varied and our partnerships so far-reaching that no one of us, not even those within the System, can keep up with them all. In the pages that follow, we want to bring you just a few of the hundreds of Extension's 2005 success stories.

As the primary outreach organization for the land-grant mission of Alabama A&M University and Auburn University, our mission is to deliver research-based educational programs that enable people to improve their quality of life and economic well-being. Our vision is to be a world-class educational organization providing real-life solutions to improve the lives of all Alabamians. These stories illustrate how we are accomplishing our mission and bringing our vision into reality in practical ways.

Alabama Cooperative Extension System
Administrative Team

Gaines Smith, *Interim Director*

Virginia Caples, *Interim President*, Alabama A&M University, and 1890 Administrator for Extension

Samuel Fowler, *Associate Director*, Rural and Traditional Programs

Chinella Henderson, *Associate Director*, Urban and New Nontraditional Programs

Stacey Bozeman, *Chief Financial Officer*

Chris McClendon, *Human Resource Specialist*

In This Issue

In this year's *Highlights* we bring you a story from each of Extension's new Priority Program Teams. Two additional stories tell about the inaugural 4-H Golf Classic, a genuinely "class" event with a special purpose, and Extension's relief efforts for the people and towns devastated by the hurricane of the century—Katrina.

Organized for Results

All of Extension's work is done in support of six overarching program areas: 4-H and Youth Development; Agriculture; Forestry and Natural Resources; Urban Affairs and New Nontraditional Programs; Family and Individual Well-being; and Community and Economic Development. Many things we do, such as the Katrina recovery efforts, insect pest management, and outreach to the Hispanic/Latino population, involve several or all of these program areas.

Your Experts for Life

Our logo says that we are "Your Experts for Life," and we are living up to that slogan. Extension specialists and agents are faculty members of either Alabama A&M University or Auburn University. They are housed on both university campuses, in each county, and at regional centers throughout the state. The new concept in Extension—regional agents—allows these faculty members to deepen their expertise in two or more of our 14 priority areas and serve several counties instead of just one. Our specialists and agents work with people at all stages and in all walks of life.

Extension Gets a Grand RAPP

Primary parenting by grandparents and relatives is a rapidly growing trend that transcends all socio-economic groups, geographic areas, and ethnicities.

According to recent census data, more than 10 percent of children in Alabama are raised by a grandparent or other relative. In some counties, the rate is as high as 20 percent. This emerging social issue creates unique issues for these “new” families.

Extension in Alabama is addressing the needs of these families with the Grandparents and Relatives as Parents Program—Grand RAPP, a creative approach to the diverse problems these families face. The primary goals of Grand RAPP are to provide technical assistance for establishing and facilitating support groups, to conduct informational sessions, and to identify community resources for grandparents and other relatives parenting children.

Under Extension’s Urban Affairs and New Non-traditional Programs guidance, Alabama Grand RAPP was created in 2001. What began as a local urban work group in Huntsville soon became a statewide coalition to address the issues through support groups and proposed state legislation.

Based on the success of the statewide network, a number of local networks have been established using the same structure. These efforts are supported in part by a grant from the Brookdale Foundation of New York City to help regional Extension agents organize community networks and start support groups. Ten local support groups have been organized across the state to address the needs of grandparents, relatives, and children. Four regional grandparent conferences have been conducted since the inception of the program. Alabama AARP, a partner in the state coalition, cosponsored and provided the primary leadership for these conferences.

Colbert County Extension Coordinator Teresa McDonald, standing left, assists with a craft project at a Grandparent Circle meeting.

Grand RAPP Around

Various agencies partner with Extension to facilitate Grand RAPP at the state level:

- Alabama Department of Senior Services through the Alabama CARES Program
- Alabama Department of Human Resources through the Kinship Care Program
- American Association for Retired Persons, Alabama Chapter



Regional Extension Agent Mary Andrews, Lauderdale County, and Grand RAPP program participants assemble back-to-school supply packages for their school-age children.

Grandparents and children across the state have benefited from their involvement with Grand RAPP. Grandparents have reported a greater understanding of how to help children with homework, how to better manage the family budget, and how to recognize learning disabilities. More importantly, Grand RAPP has taught them where to find the help they need to resolve these and other problems.



Checking Out Reality



At the Reality Check “It Could Happen to You” booth, students are confronted with unexpected circumstances that require adjusting their budgets.

Increasing debt and personal bankruptcies among young people throughout the United States have underscored a critical need for the early development of positive financial habits among the nation’s youth. Teachers and counselors throughout Alabama expressed a desire to change this trend and sought help from Extension. The Extension answer—Reality Check, now conducted in 20 counties throughout the state.

The program fast-forwards students to age 25. Participants choose a level of education they expect to complete, a career, and a life situation they expect to have, such as being single or being married with working or nonworking spouse, and number of children. Then the fun begins. They are given a monthly salary to work with before taxes. With that salary, they set up bank accounts, pay bills, and purchase a car or pay for public transportation. They also purchase a house or rent an apartment and buy health insurance and insurance for the house and car. Other expenses include buying groceries and clothes and paying child care expenses. They also may choose to make contributions to charity or put money in savings or a certificate of deposit. They may have to take a second job and work nights if they see their money running out.

Teachers and administrators absolutely love the program, and many have asked that it become an

Real Life Check

- Reality Check is a hands-on, real-life-simulation money management program designed for eighth- to twelfth-grade students.
- Reality Check addresses the realities of independent living by giving participants a glimpse into their futures and by allowing them to see what it’s like to pay bills, budget money, purchase a car, buy groceries, handle emergencies, and make other financial decisions.

annual event at their schools. They say that they hear students talking about the Reality Check program weeks after it is over.

“Reality Check gave our students a taste of what real life is all about, and it provided them with a better understanding of the kinds of financial decisions their parents face every day,” said Bessie Stanton, a teacher in Sumter County.

In addition to what it does for young people, Extension’s Reality Check program gives community leaders the opportunity to interact with students as they help run the simulation.

“This program is a fine way to teach young people financial responsibility,” said volunteer David Jackson, who ran the Reality Check bank. In real life Jackson is vice president of the Union State Bank in Pell City. “I think the kids realize they must save for the future and that there are things that take priority over what kind of car you drive or how big your house is.”

Program participants indicated on evaluation forms that their awareness of making wise financial decisions increased as did their awareness of making good career choices and getting a good education.

A student from Madison County said, “I learned all about managing checking and savings accounts and that budgeting really works.” One student from Coffee County commented he learned that living in the real world was harder than he thought. He also said, “Life is not cheap and I’d better get a good education and a good job to do the things in life I plan to do.”

Extreme Makeover: Eating Better With Less

Shopping carts of food stamp recipients in Alabama are getting an extreme makeover. They are starting to take on a new look with more fruits and vegetables, low-fat dairy foods, whole grains, and lean meat. And food stamp recipients have learned to buy all these nutritious foods at a bargain price.

The Alabama Cooperative Extension System, both at Auburn University and Alabama A&M University, received \$2 million in federal funds to provide nutrition education to food stamp recipients and those eligible for food stamps. These federal dollars are used by county Extension offices for educating the food stamp population—11 percent of all Alabamians. Not only do these federal dollars provide for education, they also boost Alabama's economy by employing 35 Extension educators.

Does our nutrition education work? Impact data from Auburn University and Alabama A&M University show that food stamp participants are becoming more aware and more knowledgeable of why it is important to eat better. They now know that leaner foods, less sugary foods, and higher fiber mean better nutrition. And better nutrition means better health.

Food stamp recipients also are learning how to use their food stamps more wisely to have more money for food during the month. By learning small but useful shopping practices, such as planning weekly menus and making a shopping list, these consumers can stretch their food stamp dollars. While these techniques sound like common sense, how many times has the average American not had dinner planned and ordered a pizza? Food stamp participants are learning that by planning a meal and shopping wisely, dinner can cost \$10 for a family of four, compared to \$20 for a pizza.

County Extension educators at both universities accomplished the education in small group classes, in one-to-one sessions, and through media efforts. At



NEP Agent Assistant Mozelle Dixon, right, explains the MyPyramid Food Guidance System at the Pickens County Health Fair.

What They're Saying

- "I never knew that dry milk used in my cooking could help me make my milk last through the month. And it tasted good too."
- "I learned how to cut up a whole chicken and get several meals from the same chicken. This has saved me a lot of money!"
- "I never understood how important it was to plan meals and make a shopping list. Now I am saving \$23 a month by doing these things. Now I save money, time, and frustration when I shop."

NEP and UNEP programs are made possible through funding from the Alabama Department of Human Resources, Food Stamp Division, and the Alabama Cooperative Extension System.

Auburn University, the Nutrition Education Program (NEP) worked exclusively in the food stamp offices in 46 rural counties in Alabama. At Alabama A&M University, the Urban Nutrition Education Program (UNEP) expanded outreach to new, inner-city audiences who live in public housing facilities as well as senior citizens in metropolitan areas.

Extension nutrition educators provide a great service to Alabama. They teach food stamp families to eat better while helping them address their most immediate need—putting food on the table for less money. The extreme makeover is improving the looks of shopping carts for more than 100,000 food stamp recipients all over Alabama.

4 Love of the Land

With our nation using natural resources at a phenomenal rate, environmental education is a must if we hope to preserve and build our nation's resource base so future generations can live with the luxuries we enjoy today.

Alabama 4-H Natural Resource and Environmental Education programs provide youth from diverse backgrounds with hands-on experiences that teach leadership and teamwork skills in a variety of activities. Outdoor adventures promote cooperation, communication, and problem solving skills. Youth are urged to critically examine information, explore options, set goals, make decisions, and work together.

Forestry judging is a major component of the 4-H forestry program. Since 1984, Alabama teams have won the national invitational 13 times and consistently placed in the top five. They are the 2005 national champions. Youth learn to evaluate forest stands, measure standing timber, identify trees, identify insects and diseases, and demonstrate compass and pacing skills. Typically, 150 youth participate in the state contest.

Participants in the 4-H wildlife programs have also enjoyed great success. Since 1987, Alabama's teams have won the national invitational five times and consistently placed in the top ten. Alabama's 2005 wildlife team is the reserve national champion. Wildlife programs provide opportunities for youth to learn the skills needed to manage and conserve habitats necessary to support wildlife. Participants must demonstrate their ability to identify wildlife foods and habitats, make management recommendations, and write urban management plans.

Shooting sports are also popular, with programs including air rifle, archery, BB gun, .22 rifle, and shotgun. All instructors associated with shooting sports are trained and certified in a nationally recognized 4-H curriculum for teaching young people the safe and responsible use of firearms. Each year youth participate in the instructional rendezvous or one of the state discipline championships. State discipline winning teams represent Alabama at the national 4-H invitational and the national Jaycees BB competition.



Alabama's Forestry Team won first place at the National Forestry Invitational. Team members and coaches are, from left, Roger Vines, Laurie Vines, Samuel Cordner, Elijah Phillips, Anna Vines, Justin Glover, and Douglas McConnell.

4-H Outdoors

The 4-H Natural Resources and Environmental Education Program reaches 19,000 young people and offers learning experiences in land management, water management, outdoor recreation, and the urban environment. Programs include

- Forestry judging
- Wildlife
- Shooting sports
- Sport fishing
- All-terrain vehicles
- Camping experiences at the 4-H Center

Alabama 4-H sport fishing is a fairly new program. Not limited by skill or physical abilities, 4-H sportfishing is open to all youth ages 9 to 19—even younger kids can participate if a parent is with them. In addition to learning about fishing and field safety, participants practice angling skills and learn about tackle crafting and aquatic ecology.

The 4-H all-terrain vehicle (ATV) safety and ethics program teaches safe riding practices. It helps preteens and teens increase their critical thinking and life skills as well as enhance their abilities to assess risks and solve problems regarding the use of ATVs. It also educates parents and other caregivers to protect young riders through selecting proper-sized ATVs and safety clothing.

Many 4-H environmental programs are conducted at the Alabama 4-H Center in Columbiana. The center's trained environmental educators conduct a residential environmental education program for school groups. This three-day field study program supplements classroom learning and fosters campers' appreciation for the interrelationships of the natural world. Classes are offered in lake ecology, water quality, herpetology, orienteering, raptor study, forestry, and astronomy.

Taking the Sting Out of Fire Ants

Fire ants are here to stay—no question about that—but Extension professionals are confident that technological strides made in the last few years will help Alabamians render their sting, figuratively speaking, less painful. Extension has been at work showing Alabamians how this scientific knowledge can be put to practical use.

Exhibits and field demonstrations set up at heavily trafficked sites such as the Peanut Festival grounds in Dothan and the Talladega Super Speedway have provided tens of thousands of people with a working knowledge of many of the new generation fire ant control technologies now available to consumers.



Speaking at a regional imported fire ant workshop last May in Anniston, Regional Extension Agent Chip East demonstrates how a seeder typically used to plant pastureland forages can be modified to apply fire ant bait over large areas.

The Super Speedway demonstration has been described as the largest demonstration of its kind in Alabama history.

Training sessions where participants are given first-hand knowledge of these new technologies have been another major focus of Extension outreach efforts. One training session in Anniston involved Extension agents, fire ant experts from Alabama A&M and Auburn universities, and industry representatives. The workshop received extensive media coverage throughout northeast Alabama.



Imported fire ants are now found in 14 U.S. states and territories.

Red imported fire ants were introduced into the United States in the 1930s and now infest an estimated 250 million acres.

eXtending Fire Ant Help

Kathy Flanders, an Alabama Cooperative Extension System specialist, will lead a Community of Practice for fire ant management in the Internet-based eXtension initiative, a national collaborative that offers Extension education to the public on topics of widespread interest.

An eXtension Community of Practice is a multidisciplinary multi-institutional team effort. Teams include university faculty, industry representatives, USDA personnel, state Department of Agriculture staff, and Extension educators, who develop programs and activities around the needs of a Community of Interest and facilitate ongoing engagement.

An eXtension Community of Interest is a worldwide audience of people with an interest in an eXtension topic area.

In southeast Alabama, a fire ant control demonstration was conducted at Eufaula's Parks and Recreation baseball and softball complex. Pre- and post-treatment counts showed a 67 percent reduction in ant mounds.

Last April, with the active participation of Extension agents and specialists, the Fire Ant Management Program also completed its fourteenth release of phorid flies, natural fire ant predators that are expected to undermine the ant's foraging ability and, ultimately, its numbers.

Food Safety at School

Extension faced a tall order in 2005: providing food safety training for every Alabama dietary manager responsible for the safety and nutrition content of the state's child nutrition (school lunch) programs—all 1,200 of them. State regulations require that these managers receive yearly training in food safety.



Jean Weese, an Extension food safety expert, stresses the importance of hygiene at one of last year's intensive lunchroom training workshops held in six locations throughout the state.

It was an even more daunting task considering that the training—10 hours for each participant—was entrusted to only eight people, one Extension food safety specialist and seven regional agents.

The training, held in six locations throughout the state, was based on the highly successful interactive teaching model "Serving It Safe," developed by the National Food Service Management Institute at the University of Mississippi and supported with a grant from the Alabama Department of Education.

Extension got the job done and received glowing reviews. In fact, many of the managers asked Extension educators to come back and train their lunchroom workers.

Pre- and post-testing revealed that the dietary managers increased their food safety knowledge by more than 50 percent as a result of the training.

Foodborne Illnesses and Deaths

- Foodborne pathogens cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year.
- Known pathogens account for an estimated 14 million illnesses, 60,000 hospitalizations, and 1,800 deaths.
- Three pathogens, Salmonella, Listeria, and Toxoplasma, are responsible for 1,500 deaths each year, more than 75 percent of those caused by known pathogens.
- Unknown agents account for the remaining 62 million illnesses, 265,000 hospitalizations, and 3,200 deaths.
- Foodborne pathogens appear to cause more illnesses but fewer deaths than previously estimated.

—Information from the U.S. Centers for Disease Control and Prevention

Due to the success of this training, Extension has been asked to develop a training program aimed at helping dietary directors, the people responsible for managing multiple school lunch programs, develop comprehensive food safety plans for their schools—plans that must be in place by the end of 2006.

Both programs were received very well. In fact, Extension is now perceived as *the* food safety experts for the Alabama Department of Education Child Nutrition Program.



Three of the more than 1,200 dietary managers who attended a series of Extension-sponsored workshops listen as food safety experts discuss safe school lunch practices.

20 Years and Going Strong

Extension's Intensive Economic Development Training Course celebrated 20 years of success in 2005.

After the University of Alabama turned down a proposal for a statewide economic development training program in 1984, V. Wilson Lee, an Extension economist at Auburn University, got administrative approval, formed a steering committee, got an \$85,000 federal grant, developed the course curriculum, and ran the first statewide training course in the summer of 1985. Through the years, Lee secured other grants and partnerships to fund the course.



Graduates of the class of 2005 represent the 20th anniversary of the Intensive Economic Development Training Course program.

Lee served as director of the training program until his retirement from Extension in 1999. In 1998, the Economic Development Institute, an Auburn University outreach agency, partnered with Extension to conduct the course and since Lee's retirement has helped provide faculty. Evelyn Crayton, Extension assistant director for family and community programs, has served as the program director since 2003.

This intensive training course introduces participants to all phases of economic development. The program leaders and faculty are experienced in economic development techniques and tailor the course to the expressed needs of professional community developers from both urban and rural settings. City managers, chamber of commerce executives and officers,

Partners in Economic Development

- The Intensive Economic Development Course was begun through a federal grant from Housing and Urban Development. Other grants have helped continue the program.
- Cosponsors have included Alabama Power, Alabama Gas Corporation, BellSouth, and Alabama Electric Cooperatives. These agencies are still active sponsors today.
- The Economic Development Association of Alabama signed on as a sponsor.
- Auburn University's Economic Development Institute began partnering with Extension in 1998 and now helps secure faculty to teach the course.

research analysts and assistants, job developers, revenue officers, industrial development board members, mayors, county commissioners, and other elected and appointed officials on the local, county, and state levels have found the course especially valuable.

Today, the course has more than 600 alumni, including most of the state's top economic development professionals. This year's class had 35 members representing large urban areas, such as Birmingham, Huntsville, Mobile, and Montgomery, and smaller, rural communities, such as Tuskegee, Camden, Tallassee, and Union Springs.

In addition to classroom presentations, this year's participants toured Auburn Industrial Park and the Lockheed Martin rocket plant in Troy. Previous classes have toured Alabama's Mercedes and Honda plants.

Teachers for the course include Extension and other faculty members as well as state and federal economic development experts and practitioners. In fact, many of the instructors are alumni of the course, who claim that the training they received has provided them with the expertise necessary for advancement in their professions.

The course runs for two weeks each year—one week in July and another in September.

Tree TLC

Where would Alabama cities and towns be without trees? It's a rhetorical question, of course. Truth is, everyone can appreciate how trees soften the sharp edges of the steel, brick, and concrete associated with urban life.

But trees in cities are special—they require a greater measure of tender, loving care. Weakened from the effects of disease, severe weather, or a combination of both, they can pose a hazard to people, places, and things—a fact driven home to the hundreds of thousands of Alabamians living along the Gulf Coast after Hurricanes Ivan, Katrina, and others in recent years.

Hurricanes have packed a powerful wallop not only to trees but to the operating budgets of cash-strapped communities as they have undertaken the time-consuming and costly task of cleaning up downed trees and limbs in the storms' aftermath.

Fortunately for these communities, supplemental funds totaling \$1.7 million provided by the U.S. Forest Service are making this task a little easier.

The funds, managed by the Extension-sponsored Urban Forestry and Community Assistance Program, have enabled cities and towns in hurricane-affected regions of the state not only to replace downed trees but to repair surviving ones.



Piles of dead and decaying tree trunks and limbs were frequent sights in many Alabama communities immediately following the destructive force of Hurricanes Ivan and Katrina.



Trees are a vital asset of Alabama communities and require the same tender loving care as other resources.

The Bark Facts

- Alabama has almost 206 million urban trees, according to the 2001 USDA Forestry Service Report.
- Of all 50 states, only Georgia was reported to have more urban trees than Alabama.
- Forty Alabama towns and cities have hired professional staff—foresters, horticulturists, and others—with the responsibility of planting and maintaining municipal trees. These people are either on the municipal payroll or operating on contract.

The primary focus of these funds has been the 12 southwest Alabama counties hit the hardest by hurricane damage: Baldwin, Butler, Clarke, Coffee, Conecuh, Covington, Crenshaw, Escambia, Geneva, Mobile, Monroe, and Wilcox. However, other communities suffering moderate storm damage also received funding.

An Extension specialist in urban and community forestry is working throughout the Alabama Gulf Coast region helping communities capitalize on these supplemental funds and training their people in urban tree maintenance and improvement. The efforts already are paying off: many communities are learning from past mistakes, opting for new, hardier tree species, and planting trees where they are least likely to harm people and property.

Simply put, the program is encouraging communities to become smarter about the trees they plant—and where and how they plant them.

Rain, Rain...

As scientists are discovering, long-term weather patterns in one region of the world can have profound implications for other regions located thousands of miles away.

For example, temperatures in the eastern Pacific Ocean exert a major impact on the climate of U.S. Gulf Coast states. Unusually warm ocean-surface temperatures along the equator, an effect known as El Niño, result in fall and winter seasons that are cool and up to 40 percent wetter than usual. Conversely, when La Niña occurs and ocean temperatures are unusually cool, a dry fall, winter, and spring will follow.

The Southeast Climate Consortium, a multi-disciplinary, multi-institutional partnership, helps farmers use climate data based on the El Niño Southern Oscillation signal to make informed crop-related decisions. This data can be particularly useful in helping farmers select among various crop insurance options to offset farm losses resulting from drought and other climate-related disasters.



Spring planting is one of many farm-related practices affected by long-term weather patterns occurring in distant parts of the world.



What is Climate?

Climate is the pattern of weather over a period of time. We speak of a “dry month” or a “wet year,” but that is weather. Climate is the broader picture, and it changes with time—over years, decades, even centuries.



Aerial spraying of soybeans is another example of farm practices influenced by climate.

Extension professionals are working with an advisory panel in the Wiregrass region to assess a series of management tools posted on the consortium’s Web site that are designed to help identify crop insurance needs based on climate predictions. They are working with farmers to determine how well these experimental online tools work, how much farmers think they will benefit from them, and what can be done to make them work better.

In addition, Extension is developing risk management models for peanuts, the Wiregrass region’s major crop. Similar climate decision models are planned for cotton, corn, and other commodities.

The consortium’s ultimate goal is to develop climate information and decision support programs for all the Southeast areas affected by El Niños and La Niñas. This information will help farmers make better and more sustainable use of natural resources.

Poultry

Waste Oil Wins

If you think gas costs are high, just be thankful you're not a poultry producer dealing with spiking propane costs.

Lots of energy is required during chickens' grow-out phase to heat, brood, and ventilate them—costs that are climbing at an alarming rate.

Rising fuel costs have more than offset producers' income increases, so net farm income is decreasing in terms of real dollars. Add to that the perennial problem of disposing of colossal amounts of broiler litter. A long-standing practice, until now, has been applying litter to fertilize forage crops, a convenient approach for poultry producers but one that presents its own challenges to surface water and groundwater quality.



Specially designed waste-oil furnaces installed on five Alabama farms have enabled growers to reap huge savings in energy costs.

Needless to say, poultry producers need an alternative, cheaper source of energy that not only reduces costs but contributes to enhanced air and water quality.

With funding from the Alabama Poultry Waste Initiative, Extension specialists and other Auburn University faculty decided to try recycled motor oil, supplemented by propane, as an alternative energy source. Specially designed waste-oil furnaces installed on five Alabama farms yielded impressive results.



Poultry production is a \$2.7 billion industry in Alabama and has an estimated economic impact exceeding \$10 billion.

Poultry Fact\$

In the five poultry houses in the study:

- Waste-oil furnaces reduced heating and brooding costs 50 to 60 percent.
- Improved air quality led to a 25 to 30 percent decrease in caked litter.
- In-house ammonia levels were reduced by 20 to 25 percent.
- Feed conversion improved 1 to 4 points.
- Test houses had lower mortality rates, higher average weight, and fewer days to target age.

All five test houses showed a 50 to 60 percent reduction in heating/brooding fuel costs. Air quality improvements resulted in a 25 to 30 percent decrease in the amount of caked litter removed between flocks. In-house ammonia levels were also reduced by 20 to 25 percent.

Flock performance also improved in terms of reduced mortality, higher average bird weight, and reduced number of days to reach target weight. The birds also made a 1 to 4 point improvement in feed conversion.

Most important of all, fuel savings coupled with improved flock performance resulted in increased profitability, the major concern facing producers.

The ABCs of Beef Production

Increasing numbers of animal disease outbreaks around the globe combined with the two cows in the United States that tested positive for bovine spongiform encephalopathy, better known as mad cow disease, have focused public interest on safe, high-quality beef. One outgrowth of this consumer interest is the development of a national animal identification system.

Professionals with the Alabama Cooperative Extension System are helping the state's cattle producers see a national animal identification system as an opportunity rather than a burden. In its third year, the Alabama Beef Connection shows producers how the program's electronic identification tags can benefit their operations.

Working with the stockyards and the Southeast Livestock Network, ABC held a pilot cull cow sale in Cullman to show producers how the system works. The Alabama Beef Network, of which Extension is a member, held eight additional pilot sales in stockyards last fall.

EID tags contain a unique 15-digit number, much like a Social Security number, that can be transmitted via radio frequencies. When the national identification system becomes mandatory, data will be transmitted to a national database. The information needed will be the seller's and buyer's premise numbers, the individual animal's identification number, the date, and approximate age of the animal.

However, other information using the same electronic tag can be stored in a database. Production and health records, information about weight, quality grade, and yield grade can be added to the animals' records. Producers can use that information to fine-tune their operations to improve beef quality and overall herd productivity.

Extension professionals say those tags will allow farmers to follow their animals through the marketing chain until harvest.

Chuck Madaris of Circle E Farms in Fort Deposit has been using EID technology to capture information chute-side for several years. In prior years, they tried to track performance data by visual evaluation and hand entering all of the data.

"That took too many hours," he said. "We have been using an EID system since 2002. Now you have to be computer literate, but once you get the system set up, it's very workable. It's saved us from having to use another hand to work the cattle." Madaris said ABC offers him good value for the information he will get on his calves.

"We run about 250 purebred Chi-Angus and 600 commercial head here at Circle E," he said. "We'll buy about 1,000 or so calves from producers who used a Circle E bull to service their cows. If we did the electronic tagging through a commercial program, it would cost us \$7 to \$8 per head more than what ABC charges us."



After scanning a steer's EID tag, Fort Deposit cattle producer Chuck Madaris enters the animal's data on his laptop to retrieve the correct record in his database.

Just the Facts About ABC

- ABC is a cooperative effort of Extension, the Alabama Beef Cattle Improvement Association, the Alabama Farmers Federation, the Alabama Cattleman's Association, the Alabama Livestock Marketing Association, and the Alabama Department of Agriculture and Industries.
- Since 2003, ABC has enrolled more than 24,000 calves and worked with more than 400 producers. Extension has also held some 40 meetings on ABC and the National Animal ID Plan.
- Producers must have completed Extension's Beef Quality Assurance Training, and they must have an industry-accepted herd health program to participate in ABC.

Extension vs Soybean Rust

A team of Extension scientists kept a watchful eye on the state's soybean crop beginning at planting. They were on the lookout for a new foe, Asian soybean rust.

While Asian soybean rust was found in 18 Alabama counties in 2004, 2005 was the first planting season that growers knew in advance they would have to take the disease into consideration. About 150,000 acres were planted in soybeans in 2005.

Buck Farris, Escambia County Extension coordinator, left, talks with producers about soybean rust. Joining Farris is Dr. Monte Miles, a USDA research plant pathologist and soybean rust expert. They were part of a USDA soybean rust mobile team effort conducted to search for rust in south Alabama.



Soybean rust could have caused significant economic losses to U.S. soybean growers. Predictions indicated yield losses of 10 to 15 percent in nearly all the U.S. soybean growing areas with losses up to 50 percent in the Southeast if the disease had not been properly managed with fungicides.

To help soybean producers battle the new disease, Extension developed a soybean rust surveillance team of plant pathologists, regional Extension agents, and county agents. The team first confirmed the presence of the devastating disease in late June. By the end of December, they had found the disease in 33 counties.

The team used a number of methods to inform producers of the disease's movement across Alabama, including the Auburn University Soybean Rust



A soybean leaf exhibiting soybean rust symptoms on the underside of the leaf.

Practical Research on Soybean Rust

The soybean rust team

- Planted 25 soybean sentinel plots
- Located 15 patches of kudzu, a host plant for soybean rust, to serve as sentinel plots
- Scouted for the presence of soybean rust one to two times a week throughout the growing season, with more than 600 on-site visits to sentinel plots and fields in production
- Detected soybean rust in 33 counties: in 10 sentinel plots, 17 commercial fields, and 20 kudzu patches
- Conducted 12 soybean rust fungicide trials on soybean, cowpea, and lima bean

Hotline, direct mailings, an Alabama soybean rust Web site with information on where the disease had been discovered as well as management techniques to battle the disease, weekly updates on a USDA soybean rust Web site, and postings to the Mid South soybean rust Web site.

In addition to providing an early warning of the disease's presence in the state, educating the state's soybean producers on how to manage the disease was imperative. The team conducted 16 soybean rust educational programs in late winter and early spring and led five soybean rust-related field days.

A Greener Green Industry

Extension professionals in 2005 led a diverse group of organizations in creating the Alabama Certified Landscape Professional program.

Extension, working with regional technical institutions, botanical gardens, and the nursery industry, launched the program to increase the visibility and professionalism of the green industry in Alabama. The green industry represents \$1.9 billion to Alabama's economy and is the fastest growing agricultural sector in Alabama.

The strictly voluntary ACLP program has earned the support of the industry because of its comprehensive approach and the broad coalition of groups working to implement it.

Extension worked with the Alabama Nursery and Landscape Association and the Alabama Turf Association to develop a manual of study materials for landscape contractors and designers. These materials are also posted online with visual training aids for identification of plants, pests, weeds, and other materials.

Partner training centers and other learning opportunities have been established at Bessemer Tech, Jefferson State, and Wallace State community colleges, which have adopted all or part of the teaching manual for their classes.

Huntsville Botanical Garden, Mobile Botanical Gardens, and Birmingham Botanical Gardens have joined the cooperative effort offering training and testing sites. Grant monies and matching funds will finance the development of testing centers at three locations around the state. Faculty from Auburn University as well as the University of Georgia and Louisiana State University are adding their expertise to the program.

Graduates of the program become Alabama Certified Landscape Professionals. Like Master Gardener graduates, they will become the teachers and test monitors.

Extension and its partners are developing a process for recertification by attending educational programs or doing home study assignments each year. This will allow landscape professionals to demonstrate that they are staying current in their field.

Eight professionals have tackled and successfully mastered the rigorous instruction and two-day testing in the program's inaugural year.

The ACLP program will help ensure that Alabama landscape professionals are among the best in the nation.

ACLP Exam Time

ACLP-certified professionals have demonstrated a high level of competency by successfully passing the following:

- Written test
- Identification exam with plant samples and pest specimens
- Architectural landscape plan take-off exam
- Practical exams in planting, pruning, reading architectural plans, applying chemicals, knowing chemical safety, and more



Landscape professional installs turf as part of the ACLP practical exams.

Bubbling With Success

Passing through the hallways of many Alabama high schools, you might just hear humming, bubbling, and gurgling coming from one or more of the classrooms. Those are the sounds of a growing trend in many schools—using aquatics as an effective hands-on teaching tool in math, science, and vocational training.



Aquatic science education has enabled many Alabama students to gain a practical grasp of math and science principles.

Aquatic science education takes a variety of forms, from small aquaria to highly complex recirculating aquaculture systems where students raise a variety of species, ranging from catfish, tilapia, and crawfish to rainbow trout and red snapper. Several of these aquatic systems have even been expanded to include small hatcheries, hormonal spawning, and aquatic plant production.

Extension aquaculture experts have played an integral part in this effort, helping schools set up and maintain these systems and assisting with much of the hands-on instruction.

In West Alabama, for example, at the Hale County Technical Center in Greensboro, Extension experts from the Alabama Fish Farming Center played a key role in the establishment of an aquascience curriculum, a course of study that combines fish and shellfish production with hydroponics, the growing of plants in water rather than in soil.

Show Them the Money

- Some schools have begun generating revenue from aquaculture projects, enabling students to acquire practical learning in marketing, sales, and entrepreneurship.
- Vocational students are deriving immediate benefits from the training, thanks to two new specially developed aquaculture programs that qualify them for employment in the aquaculture industry after graduation.

Extension oversaw the construction of an aquascience system at the center. Patterned after a model developed by the University of the Virgin Islands, the system has enabled 60 students from Hale County's five high schools to work with the center's new aquascience curriculum, a program that also includes aquaponics.

The Hale County system is one of more than 40 hands-on aquaculture programs available to high school students throughout Alabama.

Aquaculture is now a vital component of many high school science and math courses—an effort made easier in 2001 thanks to the adoption of a new statewide course of study that allows highly qualified teachers to offer aquatics as a science credit course. Teachers who have used the aquatics curriculum are impressed at how effectively it helps students relate abstract principles to real-world applications.



Extension aquaculture experts have played a key role in helping Alabama schools adopt aquatic science curricula.

Fore for 4-H

The inaugural Alabama 4-H Golf Classic was a great success, bringing 4-H'ers and golfers to an incredible golf course for education and fun.

A total of 96 golfers played at FarmLinks Golf Club near Sylacauga in June for the first-ever classic, sponsored by Alabama 4-H and the Alabama 4-H Club Foundation. Proceeds from the classic and silent auction, which totaled \$18,310, went to the campaign for Alabama 4-H to support the construction of an environmental science education center at the 4-H Youth Development Center on Lay Lake near Columbiana.

FarmLinks Golf Club is an 18-hole championship Hurdzan-Fry golf course. It is also the world's first research and demonstration golf course created to showcase turf, golf industry innovation, and product performance. Owned by the Jimmy Pursell family in conjunction with Pursell Technologies, Inc., the course serves as a living laboratory and focus group site for industry leaders.

Golfers got to meet current 4-H'ers, learn about why 4-H is important, and hear from former 4-H'ers who became Auburn University football head coaches—AU's current head football coach Tommy Tuberville and former head coach Pat Dye.

Tuberville said 4-H played an important role in his life. "4-H is an important program and, much like athletics, it shapes a young person's life," he said. "It taught me many things, and I'm glad to see that Alabama continues to have a strong 4-H program for kids."

Dye, who coached the Tigers from 1981 to 1992, told the group how 4-H was crucial during his early life in rural Georgia. "4-H was one of the few things we had to do growing up, and I appreciate what it did for me." He commended the golfers for supporting such a worthy organization for young people.



Auburn football coach Tommy Tuberville, right, and retired AU coach Pat Dye, left, enjoy the Golf Classic with Alabama 4-H'ers, from left, Trevor Moates, Stephen Bulger, and Nathan Gibson.

Financing the Fun

The 4-H Golf Classic was coordinated by 4-H regional Extension agents and the 4-H Foundation Development office. Lead sponsors included

- FarmLinks Golf Club
- Alfa/Alabama Farmers Federation
- Alabama Power Company

Prizes were donated by companies, organizations, and individuals.

4-H regional Extension agents from across Alabama collected the gifts to represent each region of the state.

Jimmie Lay of Red Diamond, Inc., of Birmingham, said he and his team had a great time on and off the course. "Everyone was very friendly and we had a lot of fun. All the kids were great to us and we loved the ice cream," he said, referring to the Mayfield Ice Cream truck that gave away free ice cream to golfers as they came off the course.

Twenty-four teams played in the classic in 2005. With such a successful inaugural classic, 4-H is already making plans for a second 4-H Golf Classic in June 2006.

Rebuilding Lives and Communities

People will remember 2005 as much for the devastation of Hurricanes Katrina and Rita as for anything else. Like so many others, we in Alabama Extension wanted



A volunteer sprays disinfectant on contaminated furniture.

to do something to help Alabama citizens, as well as displaced residents of Mississippi and Louisiana, move forward with their lives. Agents, especially in those counties directly affected by the hurricanes, helped provide immediate relief. They gathered and distributed food, water, clothing, and supplies, and coordinated transportation of grain and feed. Agents surveyed damaged crops and

provided input to state and federal reports about the damage; coordinated information and job fairs; and answered disaster-related calls about their subject-matter areas. 4-H'ers volunteered at shelters, held fund-raisers, and planned for Adopt-A-Child for Christmas activities.

Meanwhile, Extension employees in the state offices at Auburn and Alabama A&M universities went to work to gather and distribute educational materials, find contacts, and provide support to those on the front lines. News stories and blogs were posted to Extension's Web site. Emergency funding was secured to facilitate educational programs for home builders in the hurricane and flood prone areas. Regional, state, and federal resources—from full Web sites to publications and contact listings—were researched and posted to the Extension Web site. Extension offered relief staffing for Mississippi and Louisiana Extension offices, supported collaboration among agencies to distribute publications to families in temporary housing, and produced training materials for teachers and agents on helping children cope with disasters. Participation in training offered through the Southern Region Rural Extension Center allowed Extension to support efforts to help adults cope with the disasters. Extension, represented in every county of Alabama, was there during and immediately after the storms of 2005 and remains today to help people rebuild their lives.



This volunteer tears out a wall to prepare for rebuilding.

We Were There

- Much of the relief work of Extension employees fit right into their regular jobs as community, urban, agricultural, natural resources, food safety, youth development, and family professionals.
- In addition, the Extension administration granted each employee who wished to volunteer through a recognized agency, such as Red Cross or a church, five days as official, reportable time.
- More than 350 working days, or 2,800 hours, had been officially reported as of the end of December 2005, not counting the time employees donated through annual leave and their Extension-related work.
- Agents in directly affected counties worked tirelessly in the days following Katrina to help distribute food, water, and supplies to hard-hit areas and to link survivors with local resources such as food banks, health departments, Social Security offices, insurance offices, and other agencies providing assistance.
- In Mobile County, where some neighborhoods and communities were destroyed, Extension agents are working with local governments and agencies to rebuild.

ALABAMA COOPERATIVE EXTENSION SYSTEM COUNTY OFFICES

Autauga

2226 Hwy. 14 W, Suite E
Autaugaville 36003-2540
334-361-7273

Baldwin

302A Byrne Street
Bay Minette 36507
251-937-7176

Barbour

1 Court Square
Room 105
Clayton 36016
334-775-3284

Bibb

175 Davidson Dr., SW
Centreville 35042
205-926-3117

Blount

Frank J. Green Bldg.
415 Fifth Ave. E, Suite A
Oneonta 35121
205-274-2129

Bullock

132 N. Prairie Street
Union Springs 36089
334-738-2580

Butler

101 S. Conecuh Street
P.O. Box 338
Greenville 36037
334-382-5111

Calhoun

County Admin. Bldg.
1702 Noble Street
Suite 108
Anniston 36201
256-237-1621

Chambers

County Office Bldg.
Room 201
18 Alabama Ave. E
LaFayette 36862-2092
334-864-9373

Cherokee

1526 Chesnut Bypass
Centre 35960
256-927-3250

Chilton

504 1st Ave.
P.O. Box 30
Clanton 35046-0030
205-280-6268

Choctaw

218 S. Hamburg Ave.
Butler 36904
205-459-2133

Clarke

114 Court Street
P.O. Box 40
Grove Hill 36451
251-275-3121

Clay

93 County Road 31
P.O. Box 10
Ashland 36251
256-354-5976

Cleburne

72 Brockford Road
Suite A
Heflin 36264
256-463-2620

Coffee

Farm Center Complex
U.S. 84
5 County Complex
New Brockton 36351
334-894-5596

Colbert

Courthouse Basement
201 N. Main Street
Tuscumbia 35674
256-386-8570

Conecuh

David L. Burt Ag. Center
102 Liberty Street
Room 103
Evergreen 36401
251-578-2762

Coosa

Courthouse
Hwy. 231 S
Rockford 35136
256-377-4713

Covington

23952 Alabama Hwy. 55
Suite 4
P.O. Box 519
Andalusia 36420
334-222-1125

Crenshaw

Courthouse, 2nd Floor
Room 201
P.O. Box 71
Luverne 36049
334-335-6312

Cullman

402 Arnold Street, NE
County Office Bldg.
Suite G-1
Cullman 35055
256-737-9386

Dale

202 South Hwy. 123
Suite D
Ozark 36361
334-774-2329

Dallas

429 Lauderdale Street
P.O. Box 40
Selma 36702-0040
334-875-3200

DeKalb

111 Grand Ave. SW
Suite 105
Ft. Payne 35967-1991
256-845-8595

Elmore

Co. Ag. Center
340 Queen Ann Rd.
Wetumpka 36092
334-567-6301

Escambia

175 4-H Ag-Sci. Dr.
Suite D
Brewton 36426-8149
251-867-7760

Etowah

Co. Annex Bldg.
3200A W. Meighan Blvd.
Gadsden 35904
256-547-7936

Fayette

650 McConnell Loop
Fayette 35555
205-932-8941

Franklin

Courthouse, Room 1
Jackson Street N
P.O. Box 820
Russellville 35653
256-332-8880

Geneva

Geneva Co. Farm Center
2765 E. State Hwy. 52
Hartford 36344
P.O. Box 159
Geneva 36340
334-684-2484

Greene

#1 Professional Court
Springfield Ave.
P.O. Box 228
Eutaw 35462
205-372-3401

Hale

Agricultural Extension Ctr.
701 Hall Street
Greensboro 36744
334-624-8710

Henry

101 N. Doswell Street
Suite F
Abbeville 36310-2105
334-585-6416

Houston

Farm Center Bldg.
1699 Ross Clark Cir.
Suite 4
Dothan 36301
334-794-4108

Jackson

27115 John T. Reed Pkwy.
Suite 2
P.O. Box 906
Scottsboro 35768
256-574-2143

Jefferson

County Extension Office
2121 Building
8th Ave. N, Suite 1700
Birmingham 35203-2387
205-325-5342

Lamar

281 Columbus Ave.
P.O. Box 567
Vernon 35592-0567
205-695-7139

Lauderdale

802 Veterans Drive
Florence 35630
256-766-4846

Lawrence

County Ag. Center
13075 ALA-157, Suite 6
Moulton 35650
256-974-2464

Lee

County Ag. Center
Suite 4
600 S. 7th Street
Opelika 36801
334-749-3353

Limestone

Market Street Bldg.
1109 W. Market Street
Suite A
Athens 35611
256-232-5510

Lowndes

Courthouse Annex Bldg.
125 Tuskeena Street
Room 125
P.O. Box 456
Hayneville 36040
334-548-2315

Macon
207 N. Main Street
P.O. Box 830629
Tuskegee 36083-0629
334-727-0340

Madison

Charles Stone Ag. Center
819 Cook Ave.
Huntsville 35801
256-532-1578

Marengo

Co. Office Bldg.
101 N. Shiloh, Suite 100
Linden 36748
334-295-5959

Marion

Courthouse, Room 174
Military St. & Bexar Ave.
P.O. Box 400
Hamilton 35570-0400
205-921-3551

Marshall

424 Blount Ave.
Suite G21
Guntersville 35976-1132
256-582-2009

Mobile

Jon Archer Ag. Center
1070 Schillinger Rd. N
Mobile 36608-5298
251-574-8445

Monroe

USDA Service Center
334 Ag. Drive, Suite 104
Monroeville 36460
251-575-3477

Montgomery

Courthouse Annex II
125 Washington Ave.
Montgomery 36104-4247
334-265-0233

Morgan

3120 Hwy. 36 W
Suite B
P.O. Box 98
Hartselle 35640
256-773-2549

Perry

208 W Green Street
P.O. Drawer 540
Marion 36756
334-683-6888

Pickens

Service Center Bldg.
155 Reform Street
Room 300
P.O. Box 271
Carrollton 35447
205-367-8148

Pike

306 S Three Notch Street
Troy 36081
334-566-0985

Randolph

1 Main Street S
Courthouse, 2nd Floor
P.O. Box 227
Wedowee 36278
256-357-2841

Russell

Courthouse Annex
508 14th Street
P.O. Drawer 1128
Phenix City 36868-1128
334-298-6845

St. Clair

1815 Cogswell Ave.
#103
Pell City 35125
205-338-9416

Shelby

Co. Ag. Building
54 Kelley Lane
P.O. Box 1606
Columbiana 35051
205-669-6763

Sumter

321 S Washington Street
Livingston 35470
205-652-9501

Talladega

132 N Court Street
Talladega 35160
256-362-6187

Tallapoosa

Courthouse Basement
125 N Broadnax Street
Room 23
Dadeville 36853
256-825-1050

Tuscaloosa

2513 7th Street
Co. Courthouse Annex
Tuscaloosa 35401
205-349-4630

Walker

1501 N. Airport Road
Jasper 35504
205-221-3392

Washington

Frank Turner Hall
Court Square
P.O. Box 280
Chatom 36518
251-847-2295

Wilcox

Courthouse Annex
Suite 117
12 Water Street
Camden 36726
334-682-4289

Winston

Courthouse Annex
Courthouse Square
P.O. Box 69
Double Springs 35553
205-489-5376

All the People, All the Time

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Blogging – Tens of thousands of information seekers are depending on Extension for the latest information from our specialists and researchers via our news Web log at www.aces.edu. You will benefit from the very information now used by major Web search engines and linked to by state and commodity group sites representing the interests of the Alabama Forestry Commission, the Alabama Pecan Growers Association, and forest owners.

Information in times of crisis – The 2005 hurricanes are a perfect example of how people turn to Extension for information to help them through times of crisis. As Hurricane Katrina and the others approached Alabama, specialists and regional agents were busy getting information to you via our Web site and news media outlets across the state and nation. As soon as Katrina finished bulldozing through, those same Extension professionals were working side by side with homeowners, farmers, property owners, and state and local officials to find solutions to help them recover from the destruction.

Reaching the Hispanic/Latino community – Extension is providing outreach to the fastest growing minority group in the state. The Extension site at www.aces.edu contains special areas translated for Spanish-speaking Web surfers as well as resources for Extension agents and other educators.

Education close to home – Extension professionals work from Alabama A&M and Auburn universities, regional centers, and county offices in each of Alabama's 67 counties to bring you the latest in university research in our areas of expertise.



How to Reach Us

For information about programs, to volunteer, or just to ask a question, call or go by your local Extension office (see inside of the back cover). You can also e-mail your office through our Web site.

To reach state headquarters, call 334-844-4444 (Auburn University) or 256-372-5710 (Alabama A&M University).

For information about charitable contributions, call Beth Lawrence, assistant to the director, development, at 334-844-2247.

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Issued in furtherance of Cooperative Extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, and other related acts, in cooperation with the U.S. Department of Agriculture. The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.

