Clemson University Cooperative Extension Service

Annual Report to the People

2009-2010 Lexington County



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Mission Statement

The mission of the Cooperative Extension Service is to provide sound, scientifically based information to South Carolinians and help them use that information to improve the quality of their lives.

Working Together to Have a Safer Environment Powell Smith Extension Associate

We all like to go to the grocery store and find healthy, inexpensive food items on the shelves. In fact, in the United States, we almost expect to find what it takes to have our stores constantly stocked like this. Over the past several decades many changes have occurred in agriculture. One of the most pronounced has been the change in the overall number of farmers. Before World War II, each farmer fed about 3 or 4 people and 1/3 of our population were farmers. Now, we have only around 2 million farmers out of a population of over 330 million...each farmer now feeds many more people than 60 years ago. To do so, most of our production methods have changed. Some of these methods can have detrimental effects on the environment, which all of us share and must strive to protect. The use of broad-spectrum soil fumigants has allowed many producers of certain crops to increase their productivity greatly by easily and economically managing weeds, diseases, and soil pests. Also, this allowed them to use economically valuable land continuously without crop rotation. Unfortunately, such fumigants have negative environmental and health effects and regulatory measures have been taken to reduce or stop the use of these materials.



Since 1995, Clemson Extension Service has worked with other land grant universities in the southeast to help growers learn new methods of production to maintain their economic viability and lessen negative effects on the environment. This program is the Area-wide Methyl Bromide Alternatives Project and is a federally mandated project to reduce our reliance on methyl bromide, the soil fumigant shown to harm the ozone layer. The project involves a step-wise reduction in the amount of this fumigant used, education about alternatives to methyl bromide

both biological and chemical, and a strong educational effort on safety for the applicator, field workers, and the community.

Working Together to have a Safer Environment (continued)



Overall, the amount of methyl bromide now used is less than one-half of what was being used in 1990 with further reduction in progress. New mulch films have been developed to limit the amount of fumigant that escapes the soil and goes into the atmosphere. Also, new varieties with better resistance to soil-borne pests and diseases have been developed, and new methods such as grafting tomatoes and melons onto resistant rootstocks are being taught to the producers.

In Lexington County, four workshops or production meetings have been held where growers have been schooled in the new methods. Our producers have adapted the new technology to their needs and most of the mulch film put down in Lexington County now is the new impermeable type. Also, producers have started to use grafting to grow disease and

nematode susceptible tomato varieties without the use of any fumigants. Two of the workshops involved training producers about the new fumigant regulations and teaching them to develop fumigant management plans. These are documents detailing what emergency procedures would be used in case of an incident, the community notification plan, and describing the posting of warning signs about entry to a fumigated area (with times and dates). Also, the workshop attendees were taught about being fitted for and trained in the use of protective respiratory equipment.

Although we have been fumigating for years in Lexington County without incident, now the agricultural, law enforcement, and health professional communities are prepared to work together to continue to have the safe, plentiful, and healthy food supply that we all expect as well as protecting our community health and environment



Row Crop Opportunities Philip R. Perry, County Extension Agent



I am glad to have the opportunity to assist Row Crop Producers in Lexington and Saluda Counties. My responsibilies include Row Crop Production Systems, Soil Fertility, Pesticide Application and Pest Management.

I have visited corn, soybean, cotton, peanut and small grain producers in Lexington County to help with their individual farming situations. I have also measured and weighed plots for the Lexington County Corn Variety Test, Palmetto Corn Contest, National Corn Growers Countes and S.C. Soybean Yield Contest.

A Corn Production meeting for Lexington and Saluda County producers was held on January 21, 2010 at the Hollywood Ruritan Building in Saluda County with 125 participants. A program on Controlling

Herbicide Resistant Pigweed was held on February 22, 2010 at the T & S Farm, Batesburg-Leesville, S.C. with 150 farmers present.

I am a Certified Crop Adviser. Please call on me anytime that I can assist you with individual Row Crop Production programs, questions and situations. I can be reached by called the Lexington County Extension office at 803-359-8515 or by calling my cell phone at 864-993-5145 or email at prperry@clemson.edu.

Livestock & Forage Opportunities Philip R. Perry, County Extension Agent

I am very pleased to assist Livestock and Forage Producers in Lexington, Richland, and Saluda Counties. I help livestock producers with all phases of their operations to include selection, production and marketing. All livestock operations must start with a sound forage program and I offer my assistance in developing quality pasture, hay and silage production systems.

The following meetings were held for the Lexington County Cattlemen's Association in 2010 with excellent participation:

2010 - Hay Day May 17, 2010 - Ely Control

March 11, 2010 - Pasture and Hay Field Weed ControlApril 17, 2010 - Hay DayMay 17, 2010 - Fly ControlAugust 31, 2010 - Winter Annual Forage CropsDecember 1, 2010 - Beef Cattle Marketing Workshop

The membership of the Lexington County Cattlemen's Association has grown tremendously in 2010. Please call on me anytime that I can assist you with your Livestock and Forage Production programs, questions and situations. I can be reached by called the Lexington County Extension office at 803-359-8515 or by calling my cell phone at 864-993-5145 or email at prperty@clemson.edu.







Lexington County 4-H Goes to School Paulette C. Gay 4-H Volunteer Coordinator



For many years 4-H has served as a partner with the Lexington County Afterschool Programs to offer youth life skills, such as Character Counts, Foods and Nutrition Physical Fitness, Performing Arts, Gardening etc. Irmo Elementary School recognizes the importance of youth learning life skills and

putting them to practice. The school now offers a nine week 4-H Gardening program as an elective. This year 100 youth will participate in the Irmo Elementary School 4-H Gardening program.



Mrs. Sandy Smith, Irmo Elementary Teacher and 4-H Volunteer has a passion for Gardening and believes every child benefits from this hands on project.



4-H20 Pontoon Classroom



The weeklong educational program on Lake Murray is offered to 20 youth ages 10 to 12.

The program teaches the importance of Lake Murray. Participants learn about Storm water pollutants, water quality for fish, recreation, irrigation and drinking water source The

Pontoon4-H20 camp is now in its11th year and 220

youth from Lexington and Richland County have participated in this camp. More than 300 Volunteers and 150 Sponsors have given of their time and recourses to make this camp so successful.





Lexington County Haven Hill Farms 4-H Club is very blessed to have volunteers Marlene and Steve Chavis .4-H Club members have an opportunity to enjoy four acres of beautiful rolling hills and miles of picturesque white fences. A beautiful Gazebo sits atop a hill which sites four counties and provides a peaceful



atmosphere for 4-H members to learn Horsemanship. The theme of the Farm is Western which is seen throughout the Farm facilities. The Haven Hill Farms 4-H club is located directly off Exit 39 on I-20 between Columbia and Aiken just eight miles from Batesburg/Leesville.



The Junior Master Gardener (JMG) program is in its 7th year and is designed for 3rd through 8th graders. More than 335 participants and 40+ volunteers foster a love for gardening and the environment through hands on learning. They learn plant processes, propagation, water dynamics, insects, fruit, vegetables, landscaping and personal skills. The JMG group meets at the Riverbanks Botanical Garden for structured gardening glasses; participates in the Riverbanks Farmer's Market where they sell the plants they raise. They complete most of their service projects by educating the thousands of visitors to the botanical garden.

Lexington County 4-H Clubs ~ 1568 youth and 225 Volunteers Community Clubs – 6 After-School & Special Interest Clubs – 4 Horse Clubs-4



Vicky Bertagnolli, Extension Agent Midlands Master Gardener Coordinator

The mission of the Clemson Extension Master Gardener Program is to select, train, and utilize knowledgeable volunteers to facilitate the educational work of the local Consumer Horticulture Agent, by delivering research-based information to citizens of the state.

Master Gardeners in the Midlands contributed a total of 15,565 volunteer hours to Clemson Extension Master Gardener endeavors during Fiscal Year 2009-2010. Clemson Extension Master Gardeners in Lexington County contributed 9,644 of those total Midlands hours. The hours donated in Lexington included 7,218 educational service hours that were in direct keeping with the Clemson Extension Master Gardener mission of educational outreach. Lexington County Master Gardeners lead the state in the number of volunteer hours contributed to their local community last year.

Lexington County Master Gardeners delivered Clemson Extension programs to over 29,000 people. Master Gardeners were invited speakers for local churches, civic groups, garden clubs, senior centers, and schools. Clemson Extension Master Gardeners partnered with library branches located throughout the Midlands to deliver educational "Garden Like a Master" lectures and provide research-based horticultural displays. Master Gardeners were present at several farmers markets during the spring and summer months where they identified weeds, diagnosed plant problems, and provided general horticultural information to homeowners via "Ask a Master Gardener" booths.

Lexington County Master Gardeners provided services and programs unique to Lexington County. Master Gardeners designed, installed, and maintained the landscape at the historical Roof House. They also provide plant material and labor to the Lexington County Museum. The Sam Cheatham Scholarship provided tuition relief for a South Carolina college student majoring in horticulture. Funds for this scholarship were raised by the annual Lexington County Master Gardener Garden Tour ticket sales.

Teaching Landowners how to Optimize Tree Growth through Proven Thinning Techniques Beth Richardson, Area Forestry Agent

Forestry is the number one industry in South Carolina adding dollars to the average wage earners income. Ergo, it is the forest landowners of South Carolina that are providing the bulk of the wood going to the forest industry mills, whether it be pulpwood, sawtimber or poles.

Many forest landowners have only one harvest in a life time; thus, they have not been interested in managing their woodlands. However, some landowners look at growing trees as an investment that is important to diversifying their portfolio.

One of the most important forest management tools is thinning the trees so that the remaining good trees can grow larger. Over the years, as the bobtail trucks fell into the past and with mechanized logging, thinning trees has been reduced to a simple pass of taking out

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				GROSS T	REE VO	LUME			
			VOLUM	E (BOARD	FEET)	BY NUMB	ER		
				USABLE 1	6-F00T	LOGS			_
(in- ches)	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	
10	36	48	59	66	73		-		
11	46	61	76	86	96		-		
12	56	74	92	106	120	128	137		
13	67	90	112	130	147	158	168		
14	78	105	132	153	174	187	200		
15	92	124	156	182	208	225	242		
16	106	143	180	210	241	263	285		
17	121	164	206	242	278	304	330		
18		184	233	274	314	344	374		

every third row.

Through the research of Ralph Amateis, VPI, has proven that taking out every third row and nothing else does not promote diameter growth. When looking at a volume chart, there is more volume in a 14-inch diameter one-log tree than in a 10-inch diameter tree with three 16 foot logs. Thus, growing diameter is very important

The first Conservation Reserve Program (CRP) trees were thinned in 1999 at ages 10 and 11 years old. At first, it was thought that trees that small could not be commercially thinned. However, with the event of whole tree chipping, several stands in Clarendon County were the first CRP stands to be thinned in the United States.

These stands had to have a thinning between ages 10 to 13 so that they would be eligible to stay in the CRP program. A company out of Georgetown, SC, Low Country Forest Products, began thinning the stands in January, 1999. The stands were thinned every 5th row and most of the bad trees were taken out in between the 5th row, down to a basal area of about 50 square feet. All of the CRP tracts were planted with SCFC non-genetically improved seedlings.



Dr. David Dickens measuring total tree height, stand age 10, after 1st thinning on the Plowden Tract February, 1999.

After the initial thinning, the landowners agreed to have their trees managed for timber production. Ergo, when the average tree total crown ratio began hitting 35%, they were thinned again in 2006.



The Benbow Tract after 2nd thinning, 2006

The stands were thinned so that all of the smaller diameter wood was taken out as well as all trees that would not make a sawtimber tree. Over all the tracts cut, there were only 3 loads of chip-n-saw cut with the Plowden Tract not having enough chip-n-saw to make 1/3 of a load.

By the time the stands grew another 3 years, it was clear that all of them needed another thinning, thus, a 3^{rd} thinning was planned.



Lucian and son, Joe, McCutchen standing by a 20 year old tree on the Dothan sand CRP tract before 3rd thinning



3rd generation, Sharon Coleman, standing in the woods (that her grandfather planted) for the first time with a timber buyer. More ugly trees like the forked tree on the left, were removed from the stand. (Benbow Tract)

At age 21, the tracts were thinned for the 3rd time and nothing but sawtimber or potential sawtimber was left in. the stands. Absolutely no pulpwood trees remain.



S C Forestry Commission Forester, Guy Sabin stands in front of a tree on the Benbow Tract, SI5080, Fuquay sand, age 22 (herbicide treatment is controlling competion

Coring the tree to see the results that thinning has on tree diameter.



The tree is growing 6 years per inch, thus, every 6 years, it is growing 2 inches. The rings

show that the tree was slowing down before the second thinning.

In summary, these demonstrations are to show landowners how to get the best growth response by using good silvicultural thinning practices proven through research that optimizes the growth on the very best trees. These thinning methods are yielding an internal rate of return (IRR) up to 22%. All of this can be accomplish with no genetically improved seedlings and no forest fertilization. However, all stands had an herbicide release at ages 21 through 23.



Sixty people attend the Lexington Forest Landowner's Association meeting to learn more about thinning loblolly pines.



FAMILY CONSUMER SCIENCE

Nancy S. Harrison, (LCFCL) Advisor Clemson University Extension Service-Multicounty Extension Agent

Lexington County Family and Community Leaders (LCFCL)

Women's Extension Clubs in South Carolina have a long and rich history. The earliest beginnings were the Tomato Clubs on the early 1900s. In 1919 they became known as the County Council of Farm Women. Later on, in 1957 the group took on another name: Home Demonstration Clubs. This was still not the end of name changes. The Extension Clubs were to experience still more name changes: Extension Homemakers, then Family and Community Educators. In 1994 the Family and Community Educators of South Carolina felt the need to disassociate with the National organization. Consequently, they named their organization SC Family and Community Leaders. This is the name of the group at present.

State leaders felt that the move would enable the organization to restructure, redirect and continue to serve the needs of the people of SC as an independent state organization. As a result of the disassociation with the national Family and Community Educators, the Volunteer Outreach Network was formed along with the other states who withdrew from the national Family and Community Educators.

Mission

The mission of the South Carolina Family and Community Leaders (SCFCL) is to improve the quality of life for individuals, families and communities through fellowship, education and service.

Creed

As South Carolina Family and Community Leaders we strive to promote the quality of life for all citizens in our communities through dedication education and service. Fulfilling these endeavors with love, compassion and understanding, we shall respect the rights and privileges of those we serve.

Lexington County Family and Community Leaders (LCFCL)

The Counties Family and Community Leaders Organization anticipate your membership to join us and make a difference in the lives of our families. The Family and Community Leaders Organization is a voluntary non-profit organization of volunteers. It is open to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status.

The programs of the clubs and counties are focused on continuing education to improve individual family living, leadership development and community. It is an effort on the part of Clemson University Cooperative Extension Service to help rural and urban people improve their quality of life.

Lexington County FCL Membership

If interested in joining /membership of any club (news special interest club organizing), contact the Clemson Extension office at Lexington County Auxiliary Building, 605 West Main Street, Suite 109, Lexington, S.C. 29072-2550.

Lexington County FCL is working to reach goals of the organization, and recruiting members to help improve the quality of life for the people of Lexington County. Some of the educational lessons were: Boats, Cars, Planes, and Trains: Travel Safety; How to Save a Dollar When You Don't Have a Dime to Spare; Top 10 Ways to Save Energy and Reduce Carbon Footprint; Don't Let The Bedbugs Bite; Small Steps to Big Losses; Time's Up; Smile and The Community Smiles With You, also, at the FCL County Spring and Fall Council meeting, members are awarded for the services provided to the people. FCL organization includes educational trips in their programs. GREAT things are happening in this organization.



www.clemson.edu/carolinaclear/lcsc

Bill Blackston Area Watershed Agent County Agent Emeritus

The Lexington Countywide Stormwater Consortium is comprised of the communities of Cayce, South Congaree, Springdale, West Columbia, Irmo, Pine Ridge, Lexington, and Lexington County, the goal of this consortium is to enhance water quality throughout the Consortium area through education, involvement and outreach and by fostering partnerships with local

governments, businesses and organizations to support healthy, fishable and swimmable waterways.

Strategic Goal

To enhance water quality throughout the Lexington Countywide Stormwater Consortium area through education, involvement and outreach, and by fostering partnerships with local governments, citizens, businesses and organizations to

support healthy, fishable and swimmable waterways.



"We all live downstream."

Carolina Clear is a comprehensive approach developed by Clemson University to inform and educate communities about water quality, water quantity, and the cumulative effects of stormwater. Carolina Clear addresses the special significance of South Carolina's water resources and the role they play in the state's economy, environmental health, and overall quality of life.

Stormwater is the leading threat to water quality, and it is recognized that control of organizations understand its impacts, its sources, and the actions each individual can take to minimize their contribution to stormwater.



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Leadership Lexington County

Seeking the Best and Brightest in Lexington County www.LeadershipLexingtonCounty.org

LLC is designed to serve the needs of the citizens by enhancing county wide leadership and energizing community development. Leadership Lexington County (LLC) builds teams, provides leadership skills, and facilitates strategic planning and implementation tactics. Coordinated through Clemson University Cooperative Extension Service in Lexington County, LLC is a non-profit educational program which examines issues that face Lexington County.

Leadership Lexington County held its first class in 1995 and with the graduation of the 2010 LLC class this program has empowered <u>489 citizens</u> who are instrumental in the progressive community leadership of Lexington County.

This program is directed by a volunteer base advisory board composed of LLC Alumni and community representatives. Classes for each new group of participants are coordinated by the previous LLC class graduates and Clemson University. General topics explored by the LLC program are:

Public Health - Land-Use Planning - Regional Economic Development
Agriculture - Public Finance -Public Safety
Environment - Education -History -Political Systems

Positive community impact of Leadership Lexington County alumni have included many community enhancing projects to include the 9/11 monument located at the corner of East Main Street and South Lake Drive. One of the longest and most highly regarded LLC projects is the Youth Leadership Lexington County program that is offered to select rising local high school junior and seniors. This program provides students with tools to develop leadership skills and citizenship practices they can apply in school and in the community as they reach adulthood. Local high school guidance counselors strongly encourage their best students to participate in this high impact program.