

Annual Report to the People

November 2011
Spartanburg 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.”

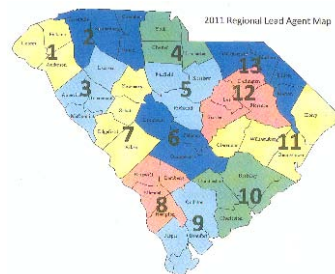
Regional Lead Agents

This past year has brought many challenges to South Carolina and also to Clemson University Cooperative Extension Service as it did in 2010. Since 2008, Clemson University’s Public Service Activities state funding has been cut by over 46%. State funding is now at the same dollar level as 1985 without adjusting for inflation or population growth in the state.

Clemson PSA once again offered voluntary separation and voluntary retirement incentives. With a much smaller staff within local offices, extension personnel, agents and specialist work together to provide services, programs, and information.

Upon a proposal from the County Operations Committee, a regional lead agent/county coordinator structure for the Extension county offices has been developed. Instead of a lead agent in every county, there will be 13 regional lead agents with supervisory responsibility for Extension personnel in three to four counties, in concert with program team managers. In addition, there will be county coordinators responsible for daily office operations and for maintaining contact with stakeholders and community leaders in their assigned county. Regional lead agents will serve as the coordinator for their home county. Both the regional lead agent and county coordinator roles are one-year appointments at the discretion of Extension administration.

This model is designed to standardize operations across the state, improve communication of county office policies and increase accountability to our stakeholders. It reduces our overall administrative investment and frees up more agents to focus on developing and delivering programs. It also offers early career personnel an opportunity to build leadership skills and advance their careers through the county coordinator position.



Beekeeping Association Returns to Spartanburg

George Dickert, Ag Natural Resource Agent

A local beekeeper in Spartanburg contacted the leadership in the South Carolina state Beekeepers Association in the fall of 2009 about wanting to re-establish a beekeepers association in Spartanburg County to share knowledge and experience about the practice of keeping honey bees as well as to promote the practice to others. There has not been a beekeeping association in Spartanburg since 1995. As a result, I was contacted by the vice president of the state association about sponsoring a local association. A meeting was set to gauge local interest in forming an association, and attendance was near 30, which far exceeded initial expectations.

As a result of this interest, I worked with the initial volunteers to set up a leadership structure and provide a meeting location here at the Extension office. A regular monthly meeting schedule was established, and the meetings were advertised locally. A board of directors was elected, and a set of by-laws was developed and adopted within the first three months of 2010. Participation in the monthly meetings has increased steadily since, with as many as 43 people attending at a time. The meetings have become more structured with time, and many invited speakers and members have given educational presentations. In the fall of 2010, many members expressed an interest in taking a course to become a SC Certified Level Master Beekeeper. I worked with the leadership of the association to design a program in keeping with the SC Master Beekeeper standards as established by the SC state Beekeepers Association and Clemson University. A training class for the Certified Level of the SC Master Beekeeper program was advertised in January of 2011.



A class was filled within three weeks, with 28 persons registering. The class not only educates new and experienced beekeepers, but also serves to bring new members into the association as well as provide a source of revenue. I provided the association with a classroom location, audio-visual equipment, and taught a section of the training program. I also set up an online depository for distributing the educational materials from the class, saving printing costs. The Spartanburg Beekeepers Association is recognized as a 501(c)3 organization, and now boasts 50 dues-paying members.

Extension Offers Basic Horticulture Skills Training to Spartanburg Parks Commission Staff

In the summer of 2010, I was contacted by the director of Cleveland Park for the Spartanburg Parks Commission about a need for basic horticulture training for his grounds crew. He mentioned that his employees often came from other occupational backgrounds, and few had any formal training in landscape horticulture.

A training date was set for early September at Cleveland Park for six staff members. A seven-hour program was developed to deliver training in soils and plant nutrition, turf establishment and maintenance, proper tree care, and integrated pest management (IPM). An emphasis was also placed on landscaping practices to reduce cost and improve efficiency. The program began with classroom presentations on the above-mentioned topics. Students were exposed to various sampling techniques and services provided by Clemson, as well as given several reference materials to assist with their maintenance practices. The afternoon portion of the training involved walking the grounds of the park to further reinforce the various topics that were discussed in the classroom portion. Crew members were able to ask specific questions regarding weed control, proper cultural practices, and how to reduce maintenance costs by using IPM practices. Soil samples were also taken. Proper pruning practices were also demonstrated and discussed at this time.

As a result of the training, staff members have begun soil testing their turf and ornamental planting areas, and applying fertilizers and lime accordingly to reduce both costs and impact on the environment. Weed control has become more targeted and effective by using IPM principles such as proper identification and using herbicides more effectively. Areas of individually planted trees and shrubs have been consolidated into larger mulched beds, resulting in less turf to maintain. There has been a noted reduction in the use of improper mulching, staking and pruning of park trees and shrubs. All of these effectively reduce long-term costs to the park, and ultimately to taxpayers.

Sustainable Small Farms & Backyards

Matthew Burns, Area Livestock & Forage Agent



Sustainable Small Farms and Backyards covered Beekeeping, Livestock, Forages, Fruit and Vegetable Gardening, Soil Fertility and Marketing. It was a 6 week program. There is a strong demand for education relating to small scale agriculture and farming. The Sustainable Small Farm and Backyards class was designed to teach producers and homeowners how manage and produce safe wholesome food products from livestock and gardened crops. It educates small farmers and homeowners on how to grow their own crops and market the excess through locally grown markets. **90% of participants said they gained new knowledge** from this program and **90% planned to change the way they garden/farm** as a result of this program. Producers from Spartanburg, Union, Pickens and Greenville Counties were in attendance.



4-H in Spartanburg County

Ginger Johnson, 4-H Agent

Approximately 1000 youth between the ages of 5-19 participated in 4-H in 2009-2010 in Spartanburg County. Spartanburg County has seven school districts and 4-H can be found in at least 1 school in every district. Some school districts are more heavily populated with 4-H than others. That is not by design.

4-H goes where we are invited, needed and have partners. As the 4-H Coordinator of this County I would like to see our membership double over the next 2 years and increase our participation with inner city youth, home school youth and private schools.

4-H relies heavily on adult volunteers. 4-H would not be possible without volunteers. The volunteers lead the 4-H Club meetings and work directly with our young people.

Spartanburg County 4-H is fortunate to have volunteers and county partners that support the program. Parks and Recreation, The Humane Society, Boys and Girls Club, Master Gardeners, Spartanburg Animal Clinic and Spartanburg County Libraries are just a few of our partners.

Spartanburg County has youth participating in the following 4-H programs and clubs:

- (6) Pet Pal Clubs
- (3) Junior Master Garden Clubs
- (1) Special Interest Beef Club
- (6) Nutrition & Fitness Clubs
- (1) Green Thumbs Club
- (1) Community Club
- (1) Agriculture & Animal Club
- (6) Embryology Projects
- (1) Pontoon Classroom Camp

4-H members can be found from one end of the County to the other. We have clubs in Woodruff and clubs miles

up the road in New Prospect and Holly Springs. We also have 4-H members stretched across the County from Cowpens to Duncan. Not only do our members stretch across the County, our educational programs are just as diverse. Programs range from Environmental Education, Plant and Animal Science to Civic Engagement, Personal Safety and Healthy Lifestyles.

Recently after a 4-H Club program on Nutrition and the kids making Strawberry Fruit Smoothies, one little boy looked up at me and said this is fun when do we meet again!! 4-H is educational but it is also fun that is what makes 4-H so unique! 4-H also believes that a child must learn by doing and loves to give the children that hand on experience from planting strawberries, training animals; studying insects in a creek and looking under a light at a baby chick develop in an egg.

Commercial Fruit & Vegetable Production

Andy Rollins, Upstate Commercial Fruit & Vegetable Agent

Thank you for allowing me to serve the upstate farms this past year! I recognize that your involvement, as citizens and tax payers, is critical to what I am able to accomplish on a daily basis. Below I will be highlighting a few of the most recent programs I am responsible for but would be glad to provide any further detail should you need it. These highlights cover work in commercial strawberries, peach, and vegetables in that order.

*New Peach Planting Technique

Oak root rot (*Armillaria tabescens*) is the major peach tree killing disease prevalent in nearly every upstate soil. It is nearly indestructible and can survive for more than 100 years in open fields after trees are removed. It is a major limiting factor when trying to grow and expand peach production in the Upstate of SC.

I have been working in conjunction with Clemson University and USDA researchers in establishing and maintaining multiple experiments that are targeted at managing this problem. The most recent work by Dr. Guido Schnabel indicates that planting depth is a major contributor to this problem and has shown in research work that a higher planting that exposes the roots, although odd, will provide relief. After learning this, we decided to do a large 3 acre trial in cooperation with one of our growers. In this test, we planted half of the 3 acres as the grower normally would but the other half was planted according to this new technique. We had some hail damage this year but the grower was able to quickly take care of the trees and they have healed over nicely. Next fall, we will be removing the soil from the new planting technique trees. The trees will then be "walking trees" because they will look as though they are on stilts. Learning in a research lab doesn't mean it is just adopted by farmers across the state. It is trials like this one that truly helps to show growers whether or not the "new" way is really worth changing the way you've always done it. Change is never easy but as in this case something has got to give.



*Fungicide Safety Testing on Squash

Downy mildew (*Pseudoperonospora cubensis*) is a disease of squash that normally attacks our cucurbit plants when present the first week of August. It is not found every year but when it is present it is very destructive and can cause 100% loss of a crop. A new environmentally responsible product will soon be released into the trade. I was able to test this product by applying it with different surfactants as well as control (untreated) areas. Applications were made during the hottest time of the day to try to induce any possible phytotoxic response if present, but I wasn't able to find any problems with any of the mix combinations. Also yield data was kept from randomized plots within the field in hopes of seeing if the fungicide would be successful in controlling the disease. Unfortunately (for the experiment) and fortunately (for the farmer), the weather conditions were such that the disease never occurred and I could not make any statement either for or against its efficiency. I am still glad I did the work and was able to help in this regard.



www.clemson.edu/extension/county/spartanburg

The Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, sex, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer.

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*Strawberry IPM Forecasting

We were one of two locations in SC included in a major multistate strawberry grant that proposes to keep more money in strawberry growers' pockets and reduce fungicide use. This project was a major undertaking of this past year and offers some hope of helping to reduce grower costs while maintaining high fruit quality standards. Last winter a weather station equipped with special sensors capable of measuring leaf wetness as well as other parameters was installed on a prominent upstate farm. The strawberry plants went in the ground in the fall and then in the spring when flowering started we collected weather data on a daily basis. This information was then put into a formula that predicts the infection potential of the primary economical disease of strawberry (Grey mold - *Botrytis cinerea*). Basically, it says spray or don't spray. Subplots were established in the field within areas that were sprayed according to the weather station and within areas where the grower maintained his normal spray program. These plots were harvested, weighed, and fruit were counted approximately every other day for 5-6 weeks. Post harvest data was also collected to evaluate fruit quality. In summary, this year we found that the grower could have only sprayed his crop 7 instead of 13 times with a fungicide without sacrificing quality. I will continue working in cooperation with this grower over the next 3 years to truly learn whether or not this research should be applied to this farm as well as others in our area.

