The Center for Disease Control and Prevention reports that approximately 76 million people get sick and 5,000 people die annually from foodborne diseases. Children, senior citizens, and people with a compromised immune system are at a higher risk. NC Cooperative Extension in Davidson County, with the support of the Davidson County Environmental Health Department offered an 18-hour ServSafe food safety certification program for food service workers. The program focuses on teaching safe food handling practices at all levels of operation. This year, 116 participants representing 110 food establishments have completed the program, with 90 participants passing the certification exam. Application of knowledge gained will reduce the risk of foodborne illness and save over $75,000 in lawsuit costs. If just one case of foodborne illness is prevented per establishment, there is an estimated savings over $8,700,000.

Field Crops are a critical part of the Wayne County farm economy with a value around $70 million annually. Field Crops such as soybeans, corn and cotton have become infested with glysophate resistant weeds such as palmer amaranth and horse weed. If control measures are not taken, field crop yields can be significantly reduced or even destroyed. NC Cooperative Extension in Wayne County has been involved in educating growers on new control measures and actively searching for new management options for control. Through a combined effort of education and local research, the Wayne County Extension Center has given local growers tools that will allow growers to control 95% of the resistant weeds. Wayne County has an annual soybean crop of 60,000+ acres, resistance control could allow growers to preserve four bushels per acre or $2.1 million.

Black shank was the most destructive disease in tobacco in Alamance County in 2008. Farmers need the latest information in order to manage this disease in their tobacco fields. Over the last three years, NC Cooperative Extension has been providing tobacco farmers the latest data from on-farm tests for the best control methods for this disease. Area and county tobacco meetings, farm visits, telephone calls, and newsletters have all been used to help farmers cope with this disease. In 2009, 68% of the tobacco acres had a combination of control methods used on them to manage black shank. Farmers were able to increase income by $500 per acre on 918 acres of tobacco because of their efforts to manage this disease with Extension's recommendations. This represents a total increase in income of $459,000.

In 2007, Onslow County requested $328,378 from the NC Division of Water Resources for a waterway debris removal project. The county received $100,000 for Phase I of this project, and $150,000 in 2008-2009 for Phase II. Between the efforts of the debris removal program and the alligatorweed spraying program, side channels on the New River are much more visible and have improved flow. An oxbow that had not been navigable was open this summer for the first time in 10 years. Several fishermen stopped us to say “Thanks!” The same is true on Northeast and Little Northeast Creeks. These efforts also help to reduce flooding risks, improve aquatic habitat, and decrease mosquito habitat. The remaining $78,378 has been requested from the state for Phase III. This project is a coordinated effort between Onslow Environmental Services Division (formerly Soil & Water Conservation and Vector Control) and NC Cooperative Extension.

Each year, the Franklin County staff attends numerous youth career fairs at local high schools, community colleges, and other private organizations to help recruit new clientele and to increase an interest in agriculture among area youth. In 2007, the Agricultural Extension Agent attended one such career fair at a local high school and talked with a young man who wanted to continue working on the family farm after graduation, but was unsure of whether or not to pursue a college degree. After talking with the Agent about the benefits of either choice, the young man decided that a college education could be used for the family’s benefit, once he returned to the farm. He enrolled in the Agricultural Institute at NC State University and is expected to complete his degrees in both Agribusiness Management and Field Crops Technology in the spring of 2010. He plans to return to the farm.
Some theories of juvenile delinquency suggest that youth develop delinquent behavior patterns because they have not identified with appropriate role models in their environment (Hawkins & Weis, 1985). Mentors can serve as models with which youth might identify, leading to increased socially appropriate behavior and reduced delinquent behavior. In Union County, 4-H partnered with the Juvenile Justice Department’s, Connecting Futures program to offer a mentoring program. The program matches a young person to a community leader. Youth spend time with mentor. In addition, these youth are involved in a life skills program to prepare them for college and the workforce. Currently, the program offers mentoring to females only, but plans to expand to males in 2010. Fifteen females from middle to high school are involved. The program witnessed successes in keeping youth in school. One youth from the program graduated from high school in the spring of 2009, is now successfully attending a four-year college, and maintaining a 3.0 grade point average.

A concern with the public in regard to the landscape industry is the offsite movement of sediment, fertilizers and pesticides. To address this concern, a series of workshops on landscape Integrated Pest Management (IPM) and Best Management Practices (BMP) were held for 245 landscapers and their employees. This series focused on innovative BMP and IPM techniques for the landscape, and 96% of surveyed participants increased their knowledge on the prevention and management of pest problems through non-chemical methods. To date, 83% of surveyed participants have implemented one or more of the recommended practices resulting in a savings of $86,275 in chemical and labor costs. Those practices related to IPM have resulted in less pesticides being applied to the environment, and has created an awareness among 99% of the landscapers and employees surveyed on how to become better environmental stewards.

The Onslow Septic System Database, Repair, & Information Program (SSDRIP) went "live" in January 2009. Through this program, there have been 3 grant and 5 loan applicants for septic system repairs. Two more applications (one loan, one grant) are currently being processed. These grants and loans help people who otherwise might not be able to afford needed repairs to their systems. The program participants received roughly $50,000 in assistance. The program is funded by the Clean Water Management Trust Fund (CWMTF), and is a partnership among NC Cooperative Extension, Onslow County Environmental Health, and Onslow County Planning Department.

Cattle producers in the Northeast needed a better way to market their cattle. Several of our Extension Agents in the Northeast region pooled their resources and organized a truckload cattle sale, where cattle buyers bid on the cattle. Cattle were brought to a handling facility in Windsor, NC and were sorted, weighed and shipped out. In 2009, 1,059 feeder calves that average 580 pounds were sold. By selling in truckload lots, weighing when received, and reducing the selling commission, producers were able to receive about five cents per pound more for their calves over weekly auction sale prices. It is estimated that producers that sold on these sales in 2009 receive about $30,000 more for their cattle by selling in truckload lots.

The Waxhaw Farmers Market (WFM) faced several challenges in 2009. The highly visible spot used as the Market space had been sold. Our Extension Agent in Union County assisted the Board in finding a new location, and advised them on set-up and marketing. He also worked with the Board and assisted them in obtaining a $30,000 grant from RAFI-USA. The grant has enabled the market to buy new tents for the entire market, and to expand the sales area. When the manager had to quit for health reasons, he assisted the Board in finding volunteer replacements for the balance of the season. When the Market encountered trouble meeting the sign regulations of the Town of Waxhaw, he acted as intermediary to help both sides understand the others’ needs and a solution was found. After a very eventful year, the WFM is already looking forward to the 2010 season.
The 2007 results from the Center for Disease Control indicate that 10.2% of the population in Randolph County has a diagnosis of Type II Diabetes. This is a 2.6% increase from the 2005 data. Access to education, once diagnosed, is a major concern. Education is available through the local hospital, but costly and not always covered by insurance. NC Cooperative Extension partnered with the hospital, health department and a rehabilitation facility to offer a four-week series, *Dining with Diabetes*; 24 adults participated and learned best practices for managing the disease. **Summative evaluations indicated that as a result of the class, 67% were now working to control their daily carbohydrate count; 75% were now including exercise into their daily routine; and 75% had learned to make better food choices to manage the disease. Several participants reported that this program was more beneficial than comparable programs offered in the for-profit community.**

In today’s economy, ask any farmer what their biggest challenge is and the most common response you will hear is farm profitability. Small farms are facing an especially difficult time as discretionary income is drying up as farmers struggle to make ends meet. As a result, the NC Cooperative Extension Service in Hoke and Scotland Counties have been directing their educational programs toward helping small and part-time livestock farms become solvent business enterprises. Commodity and individual meetings are geared toward helping farmers make this transition. One cattle farmer in particular has been working with NC Cooperative Extension on retooling his cattle operation. **Calf marketing strategies, bull selection and a controlled breeding season are some of the key management schemes that were adopted due to Cooperative Extension’s recommendations. After adopting these best management practices over the last two years, this farm has increased its gross revenue by an average of $20,000 per year.**

Over 66% of Americans are overweight. Excess weight is a risk factor for heart disease, stroke, Type 2 diabetes and certain cancers. Heart disease is one major chronic disease leading to death in Lee County. **Faithful Families Eating Smart/Moving More** is offered at faith communities in Lee County to help battle obesity. A **husband and wife team who attended class at their church reported losing a combined 32 pounds at the end of the program. Information they learned in class led to packing healthy lunches, increasing whole grains, increasing fruits and vegetables, limiting soda, eating more at home and increasing exercise. Their children are benefiting from the healthier diet and from having limits placed on video games in exchange for outdoor play. This program is making a difference in Lee County.**

Alamance County has no permanent hazardous waste disposal site. Citizens need a place to dispose of certain waste products in a safe manner. NC Cooperative Extension and the Alamance County Landfill partner to have a disposal day available for the citizens of the county to bring in paints and pesticides for free disposal. This helps keep these products from ending up in the landfill. **Our fall collection day resulted in the following products being brought in for disposal; paint and paint related materials-57,845 pounds, aerosols-1,600 pounds, flammable liquids/solvents-800 pounds, pesticides-925 pounds. There were 565 citizens participating in this collection day.**

Three health risk factors: physical inactivity, excess weight and low fruit and vegetable intake carry a combined health cost of $4,690 per North Carolinian per year. The *Eat Smart, Move More, Weigh Less* series conducted in Alexander County was completed by a total of 26 individuals. **Changes reported at the conclusion of the series indicate an economic benefit of $54,614. This represents $27,450 saved by increasing physical activity, $19,072 saved by losing weight and $8,092 saved by increasing fruit and vegetable intake. One participant reported avoiding a pending insurance premium increase. Losing 15 pounds dropped her BMI from 32 to 29, and thereby saved her $179 per month in premium costs.**
Pitt County swine producers are required to get a sludge measurement in their swine lagoons annually and to also have their land application equipment calibrated every other year. These practices meet Division of Water Quality requirements, while helping to ensure a properly maintained lagoon and a system that applies nutrients efficiently at agronomic rates (which optimizes crop growth while protecting the environment). Our Extension livestock agent assisted swine producers with these efforts in 2009 by conducting sludge surveys on 28 lagoons and calibrating application equipment on 11 farms. These practices helped producers meet state standards, ensure a better job of lagoon and application equipment maintenance, enhance environmental stewardship, and also save an estimated expense of over $11,000 (cost of paying private individuals for this work).

Two local independent hog producers were required to have a site assessment performed on their farm before they could sell their next load of hogs to Smithfield. The Robeson County Livestock Agent is certified to teach Pork Quality Assurance, Trucker Quality Assurance, and perform site assessments. She visited both farms and worked with the producers to complete the necessary paperwork to have their site assessed and sell their hogs. Both producers were allowed to continue to sell their hogs because of the agent’s ability to quickly perform a site assessment, bringing in immediate additional income of $5,000 to the farms.