

Executive Summary

In 2009, the Research Stations initiated a strategic planning process in which four main goals were identified as mission critical. Progress for each goal in 2015 is summarized in this report. Key highlights include:

Over FY 13-14 and FY 14-15, \$5 million was appropriated for research stations to upgrade equipment. Over the two-year appropriation, the Research Stations acquired \$7.79M of new equipment. This was done by leveraging the trade-in value of outdated equipment as well as some self-generated receipts. In total, 165 pieces of modern agricultural equipment were acquired for supporting agricultural research across North Carolina. These included tractors, planters, irrigation equipment, harvesters, utility vehicles, and many more which greatly enhances the capacity, precision, and relevance of agricultural research on the Stations.

Building on previous years' efforts to improve the beef cattle research platform in North Carolina, embryo transfer (ET) from the superior cattle at Upper Piedmont Research Station near Reidsville continues to be the primary method of establishing uniform genetics among all of the resident herds. The goal continues to be genetic improvement and consistency, allowing for research that is not limited by cow numbers at any one station. Several research projects focused on fescue toxicosis have been initiated as a result of the increased capacity across all of the stations dealing with beef cattle.

In 2015, the Bioenergy Research Initiative (BRI) initiated its third grant cycle by awarding \$1 million to 12 separate projects. Nine projects are with NCSU, two with Carolina Land & Lakes RC&D Council and one is with Appalachian State University. The portfolio of projects expanded beyond production of trees and perennial grasses to using wood pellets for heat and developing a biomass/bioenergy roadmap.

The Research Stations continued to utilize a regional management approach that takes advantage of the diversity and connectedness of the system. The sharing of both labor and equipment resources is becoming the norm and a standard way of doing business. Efficiencies are gained and capability at individual stations is enhanced by pooling resources to accomplish the research mission

During 2015, Research Stations hosted 474 agricultural research projects with 117 faculty at NC State, NC A&T, and USDA-ARS, utilizing 1,233 acres in small plots (not including land for pastures and forages). The Stations hosted over 15,000 registered visitors at 398 separate events such as field days, seminars, workshops, and other training events.