

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 2016 is summarized in this report. Key highlights include:

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 2016, the Bioenergy Research Initiative (BRI) initiated its fourth grant cycle by awarding \$1 million to 13 separate projects. Eight of these projects are new; six build on previously funded projects and two are new concepts for the BRI. Four projects were extended in time and one project was expanded in scope.

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. Close tracking of the labor required of individual research projects has provided a clearer picture of the cost of research and aided decision-making in resource allocation.

Flooding from Hurricane Matthew greatly affected operations at the Cherry Research Farm in Goldsboro. Working collaboratively, the entire Research Stations Division responded to the critical needs at Cherry Research Farm with labor, expertise, hay, and supplies. Despite the need to ferry staff to work by boat, no animals (dairy, beef, and swine) were lost and research projects were able to continue.

Depressed agricultural commodity prices limited the Research Stations ability to make significant investments in capacity in 2016. About two-thirds of the Research Stations operating budget is appropriated receipts. However, some improvements in buildings and equipment were possible and were made as the opportunity arose.

During 2016, Research Stations hosted 501 agricultural research projects with 97 faculties at N.C. State, N.C. A&T and USDA-ARS, utilizing 1128 acres in small plots (not including land for pastures and forages). The Stations hosted over 16,935 registered visitors at 443 separate events such as field days, seminars, workshops, and other training events.