# AgResearch and Education Center at Greeneville

#### **Discovery**

One of 10 outdoor research and teaching laboratories in the University of Tennessee AgResearch system, the AgResearch and Education Center at Greeneville serves the agricultural community of upper East Tennessee. The center works closely with UT faculty and students to discover firsthand the fundamentals of science. They test ideas about bettering the quality of life through improved agricultural products and enhanced and sustainable agricultural practices as well as the wise use of natural resources.

Specifically, the center helps discover and prove scientific fundamentals that will help producers improve tobacco and livestock production. The goal is to improve the overall profitability of the land.

#### **Innovation**

Research performed at the center strives to help landowners produce better and more abundant crops and healthier beef cattle. The center is known for developing better burley tobacco varieties. Most commercially grown varieties available today contain genetics developed through the center's breeding program.

Other advances through the years for tobacco have included mechanized planting, greenhouse transplant production, no-till production to preserve soil, and improved harvesting and storage methods. In terms of beef cattle, studies have focused on animal health and development. All efforts are geared towards ensuring a sustainable environment while conserving the soil, water, air and wildlife.

### **Application**

Tobacco and beef cattle are historically the best-suited commodities to the region's smaller-size farms and hilly terrain. Six acres of tobacco and a few head of cattle were once more than enough to sustain a small family farm. Although consolidation has changed the face of East Tennessee agriculture, the center continues to work for the benefit of all producers and consumers in the region.

Educational programs such as field days and on-site workshops and courses for agricultural professionals as well as students are but a few of the ways the center supports those who ultimately benefit the most from the university's land-grant mission.







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#### **Our Facilities**

Founded in 1932 and originally known as UT's Tobacco Experiment Station, the facility's name was changed to the AgResearch and Education Center at Greeneville to more accurately reflect the center's mission to meet the agricultural research and information needs of upper East Tennessee. The center includes some 500 acres plus additional land that is locally leased to meet the scientists' requirements.

**Tobacco** remains a significant and profitable commodity for the region's farmers, and the center remains committed to researching production improvements. Success to date has been outstanding:

## Our Local Impact

Education Center at Greeneville hosts numerous industry and public tours, but its two regional agricultural events — the To-

bacco and Forage Production Field Day and the Northeast Tennessee Beef Expo
— annually attract nearly 400 members of the ag community. Farmers and ranchers who attend these programs learn from UT and industry specialists about the best production practices.

Annually, the center also hosts Kids Day on the Farm. That day each year almost the entire third grade class of Greene County — that's nearly 700 enthusiastic young minds — spends a day learning about how and where their food is produced. For many, it's their first trip to a farm.

Beef and tobacco contribute a combined total of \$642 million to Tennessee's economy. accounted for better than 75 percent of the 2011 U.S. burley crop.

• The center currently shares a breeding program with the University of Kentucky. Emphasis is on breeding improved cultivars, especially plants resistant to disease, while maintaining

**Beef** is among Tennessee's top commodities. Some 42,000 producers sell more than \$545 million in cattle and calves annually. Greene County is among the most productive beef cattle counties

in the state, with other East Tennessee counties contributing heavily to the total. Efforts to help cattle producers include:

- Evaluation of replacement heifers and reproductive efficiency.
- Health and development of weaned calves.

**Forage** evaluations also rank high among the center's priorities. Scientists conduct an extensive annual forage variety testing program to provide area producers with upto-date information on forage quality and effects on livestock fertility and weight gain. Tests include:

- Evaluations of summer and winter annuals as well as cool-season perennials and legumes such as alfalfa and clover.
- Cattle response to grazing native warm-season grasses.
- Utility of grazing plants also suited for biofuel production, including weight gain of steers grazing switchgrass.

The work performed at the Greeneville center and other UT AgResearch centers helps drive Tennessee's approximately \$75 billion agricultural-based economy.

Visit the AgResearch website at http://agresearch.tennessee.edu.

