The Overton Center opened on June 1, 1967, thanks to the initiative of East Texas agricultural and community leaders and the Bruce McMillan, Jr., Foundation. The McMillan Foundation initially provided $300,000, 150 head of Hereford cattle, 22 acres of land, and a three-year lease for an additional 1,221 acres. The McMillan endowment later totaled over $700,000, and the neighboring J. T. Montgomery family donated 4.5 acres for the center headquarters building.

Approximately one-third of the income in the Overton district comes from farm-gate revenues. Primary agribusiness activities in the 22 counties of East Texas served by the Overton Center are cattle, timber, horticulture, and poultry, with related recreational, feed crop, dairy, and other livestock interests. All contribute to the region’s roughly $5.2 billion annual agricultural income. Since the Overton Center's establishment, livestock research is estimated to have contributed to a $100 million increase in farm-gate income.

Texas A&M AgriLife Research at Overton conducts innovative fundamental, translational, and applied research addressing production systems, natural resources, and environmental conditions. The discovery of new agricultural principles and the technology transfer of these principles and production applications are key components of our research goals.

**Current Research**

**Grazing management research to develop optimum use of forage resources**

The Overton Center has identified optimum stocking rates and strategies to maximize land-use efficiency in producing beef cattle weight gains on pasture. Forage and soils data from long-term experiments document the impact of stocking rates and fertility regimens on soil nutrient status at multiple depths. Nutrient cycling returns key nutrients to pastures via excreta and plant decomposition, providing a way to grow forage without nitrogen fertilizer. This in turn reduces the need for fossil fuels used to produce fertilizer. This research has enhanced the efficiency of producing natural forage-fed beef.

A 30-year project at Overton revealed the impact of grazing management on Bermuda grass ecotype composition. Current and long-term pasture and plant sampling documented extensive ecotype diversity in response to beef cattle stocking rate, fertility regimens, and other factors. Center researchers also initiated a study with Kilgore College to estimate irrigation water requirements of ‘Coastal’ and ‘Tifton 85’ Bermuda grass, and Overton released ‘Rio Verde’ lablab, a new crop for the Texas seed and forage industries. New lablab cultivars with improved Texas seed production are currently in breeding trials.

**Effects of early puberty, temperament, and stress on beef cattle**

Overton Center researchers study the effects of these factors on the growth, reproduction, and health of tropically adapted beef cattle. Research on stress response shows that cattle temperament affects production efficiency, immune response, and product quality. The center is developing an early-calving line of tropically adapted Brahman cattle to increase beef production efficiency in Texas and in tropical regions throughout the world.
Developing and releasing adapted varieties of clover and ryegrass
A 30-year project at Overton provides data on the carbon content of soils from Bermuda grass pastures that were either fertilized with nitrogen or managed with legumes and were tested with three levels of grazing pressure. Data shows that carbon sequestration was enhanced by stocking rate, fertility regimen, and overseeding of ryegrass or clover. Other research demonstrated the potential for developing salt-tolerant ryegrass cultivars for lawns and golf courses that can be irrigated with marginal water.

The Overton Center released and licensed four new cultivars: ‘Neches’ white clover, ‘Sabine’ crimson clover, and ‘TAM TBO’ and ‘Nelson’ ryegrass. The early and profuse flowering traits of ‘Neches’ clover will save stakeholders approximately $1 million each reseeding year, assuming ‘Neches’ is only 5% of total white clover use. ‘Sabine’ clover was developed to improve the reliability of long-season forage production as a component of ryegrass-clover mixtures. The two new tetraploid ryegrass varieties have improved vigor and productivity over previous varieties.

Evaluating ornamental plant varieties for greenhouse and field performance
Hundreds of new varieties of ornamental plants have been tested at the Overton Center to determine suitability for use in the region. The best-adapted ones have been identified as Texas Superstars® and promoted to stakeholders through regional programs, websites, and field days. The Texas Superstar Program featured four major plant promotions in 2011. Each one increases sales and promotes the use of Texas-friendly ornamental plants.

The Overton Center initiated cooperative research to develop roses broadly adapted for heat tolerance and disease resistance. These roses would increase the sales of the National Flower and provide landscape plants that would reduce the need for pesticides and have reliable ornamental value for home and commercial landscapes.

Research Impacts
• Overton Center research has a current annual economic impact of $150 million on the $1.5 billion forage, pasture, and livestock industries of East Texas.
• The center has contributed to the growth of horticulture in East Texas to an over $1.2 billion industry.

Overton Center Facilities
• Overton — 28,186 square feet at the headquarters building approximately 2 miles north of downtown Overton, including an auditorium seating 275, a classroom, kitchen, videoconferencing, offices, and laboratories. The grounds contain six greenhouses, one head house, chemical storage, and a shop. Research is conducted on 1,200 leased acres of pasture, forest, and plot lands.

About Texas A&M AgriLife Research
A member of The Texas A&M University System
Established in 1888, Texas A&M AgriLife Research is the state’s premier research and technology development agency in agriculture, natural resources, and the life sciences. Headquartered in College Station, AgriLife Research has a statewide presence, with scientists and research staff on other Texas A&M University System campuses and at the 13 regional Texas A&M AgriLife Research and Extension Centers. The agency conducts basic and applied research to improve the productivity, efficiency, and profitability of agriculture, with a parallel focus on conserving natural resources and protecting the environment. AgriLife Research has 550 doctoral-level scientists, many of whom are internationally recognized for their work. They conduct hundreds of projects spanning many scientific disciplines, from genetics and genomics to air and water quality. The annual economic gains from investments in Texas’s public agricultural research are estimated at more than $1 billion. Through collaborations with other institutions and agencies, commodity groups, and private industry, AgriLife Research is helping to strengthen the state’s position in the global marketplace by meeting modern challenges through innovative solutions.