

# **Agricultural Experiment Station Clayton Livestock Research Center**

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## MISSION

To provide science-based research to improve the health and performance of newly received cattle, and to support the Agricultural Experiment Station in providing premier programs to those we serve by focusing on education, research, and outreach.

One of a few university feeding research centers of its size, and services the industry nation-wide.

Improvements to the Center are ongoing with recent renovations to the front office, as well as, current renovations to the feed mill, processing barn and shop, and construction of improved



The Clayton Livestock Research Center (CLRC) was established on 320 acres of Kiowa National Grassland, Cibola National Forest, and located 7 miles east of Clayton, NM on Highway 56/64/412. Plans for the CLRC began in 1972 with construction commencing in 1975. Research is focused on improving health of newly received lightweight calves that may or may not originate in New Mexico but are utilized for stocker operations grazing New Mexico rangelands, as well as, the health of New Mexico range calves shipped outside the state for placement on grass or into feed yards.

commodity storage.

The installation of nine SmartFeed nodules and 3 SmartWeigh systems this past year will measure feeding behavior and individual realtime weight of animals in the feedlot.



#### **Value Added to New Mexico**

• Feedmill



### **Ongoing Research**

The focus of the CLRC is the health and performance of newly received beef cattle. Several receiving studies were conducted including sponsored projects evaluating products that potentially may impact performance.

Research on the evaluation of different bunk management and roughage levels for finishing beef cattle can validate a nutritional recommendation for finishing cattle. In 2021, the CLRC was used to demonstrate that roughage levels should be adjusted according to the bunk management to optimize intake and rumen fermentation characteristics of finishing beef cattle.



The College of Agricultural, Consumer, and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research and Extension programs. Research is continuing to evaluate the performance and carcass characteristics of Raramuri Criollo cattle crossed with Angus, Red Angus or Brangus cattle. Currently, in year 2 (of a 3-year project), cattle are in the feed yard and will be finished in late Fall 2022. The objective is to evaluate the performance of the crossbred cattle on pasture and feedlot performance, and carcass characteristics.

### **Recent Impacts**

Supplemental or additional water availability upon calf arrival to the feed yard may be an important factor upon the health and performance during the receiving period. Increased water and feed intake were observed for those calves provided supplemental water sources and both are an important component of maintaining a high level of immune function. Developing strategies to maintain a healthy immune system will reduce morbidity and increase net income.

A recently completed study has shown that feeding 3.5% yellow grease as supplemental fat during the receiving phase increased feed efficiency and decreased overall morbidity rate. Further validation could provide a new tool to reduce morbidity, and decrease antimicrobial use, therefore increasing overall profitability when introducing calves to the feeding phase.

# **Community Outreach**



The Clayton Livestock Research Center hosts field days to highlight completed and ongoing research projects, familiarize the community with the center facilities, and increase confidence in how research is conducted so that they may apply the resulting protocols and practices to increase the financial sustainability of their livestock operations.

Internships are an important component of the CLRC mission as a tool to introduce the feeding segment to interested young scholars. Recently, interns from Brazil have had the opportunity to learn all facets of the industry, including ration formulation, mill operation, bunk reading, animal observations, treatment, etc.



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