Eastern Gama Grass Grazing Trial

Malcome Kirkland - Plant Materials Center

The main grass used in this project was Eastern Gama grass, variety "Pete". Eastern Gama grass is a highly productive grass with potential to yield up to 10 tons of dry matter per acre. The quality of Eastern Gama is also good when harvested at succulent growth stages. Crude protein ranges around 12% and up to 15%.

The year 2000 brought a second time around for a cooperative project between the Lamar County Soil and Water Conservation District and the Jimmy Carter Plant Materials Center located in Americus, Georgia and managed by NRCS. In addition, in 2000, United Bank of Barnesville and Ivomec joined the project. The project is an attempt to demonstrate the use of warm season native grasses in cattle grazing systems.

The project is located on a 5-acre pasture of Eastern Gama grass that was planted in March of 1993. The pasture is divided into 10 equal size paddocks by a single strain of electric fence. The cattle are rotated in and out of each paddock usually about 3 ½ days per paddock, which allows about 35 days to complete a full cycle. The cycles are then repeated through out the growing season. Days of

grazing in each paddock can be adjusted to reflect the amount of grass available. Rotational grazing like this seems to be the best management practice for warm season native grasses. Maintaining a 10 inch stubble height or higher is critical for Eastern Gama or severe degradation of the pasture can occur if continuously grazed lower.

In March of 2000, the Lamar County SWCD delivered 12 steers to the PMC in Americus. On April 27, the steers were weighed and moved to the Eastern Gama pasture. The steers' average weight at this time was 705 lbs each. The steers were weighed again on June 14, 48 days after grazing started. The steers averaged 805 lbs each at this time. This showed a gain of 100lbs or 2.1lbs gained per day. During this time period we had almost no rainfall. Rainfall amounts were approximately 1.1 inches in April, 0.2 inches in May, and only 0.1 inch up to this time in June. The Eastern Gama was still green and growing but at a slower rate than the 12, 800 lb steers were consuming it. A decision was made to move the steers off the Eastern Gama for awhile to give more time for re-growth of the grass under the drought stress



Supervisor Edwin Foshee inoculating cattle. Supervisor Noel Riggins, (in the background), hauled the cattle to the PMC.

conditions. The steers were moved to an Indian grass pasture, another warm season native, although the Indiangrass is less productive and somewhat poorer quality than the Eastern Gama grass. The steers were moved back onto the Eastern Gama after 38 days of re-growth. The steers remained on the Eastern Gama pasture until September 3, when they were weighed and sold. The average steer weight at this time was 901 lbs each. This gave a summer long average of 196 lbs gain in 133 days or 1.5 lbs gained per day.

Crude protein averaged 11.77% and ranged from 10.05% to 13.56%. Digestible organic matter averaged 66.78% and ranged from 63.74% to 69.45%.

Expectations from the project were a little less than what we had hoped, but given the circumstances of the extreme drought, results still looked good.