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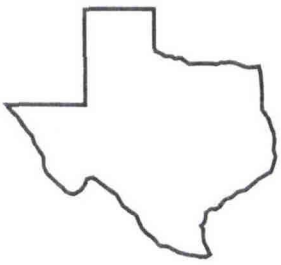
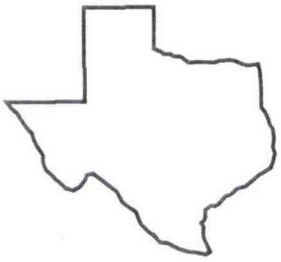
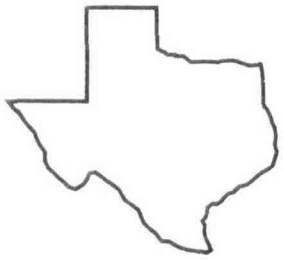
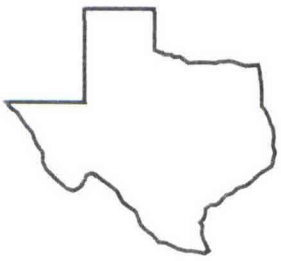




Overton Field Day Report - 1994





1994 Research Center Technical Report No. 94-1

Texas Agricultural Experiment Station • Edward A. Hiler, Director
The Texas A&M University System • College Station, Texas

FEEDLOT PERFORMANCE AND CARCASS TRAITS OF HEAVYWEIGHT LONG-YEARLING AND MATURE STEERS

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Background. Steers which graze winter pastures for 150 days or more have the potential to gain 300 to 400 pounds. Thus, 600-pound steers that initiate grazing small grain-ryegrass which has been overseeded on bermudagrass pastures may weigh in excess of 900 pounds before the winter-spring grazing season has been completed. Steers which reach these weights often provide optimum or maximum profit potential if ownership is continued into the feedlot. Two different age groups of steers, long-yearlings (16 to 18 months) and mature steers (3 to 5 years) grazed 'Elbon' rye-'TAM 90' ryegrass-'Coastal' bermudagrass pastures to end-weights in excess of 900 pounds. The objective of this research was to evaluate feedlot performance and carcass characteristics of these two diverse groups of steers.

Research Findings. Steers were transported to a commercial feedlot in Hereford, Texas at different dates to accommodate pasture experiment objectives and off-pasture weights. Long-yearlings that departed the Texas A&M University Agricultural Research and Extension Center at Overton at 973 pounds and fed for 103 days had an average daily gain (ADG) of 3.28 lbs with a pay weight of 1267 lbs. Feed conversion of 6.79:1 was very acceptable for this weight steer. The long-yearlings consumed 25.56 lbs feedlot ration per day (2.27% body weight [BW]) and total costs/lb of gain were $.5305.

Mature (3 to 5 years of age) steers which departed Overton at 915 lbs and fed for 118 days had feedlot ADG of 2.30 lbs with a pay weight ADG of 2.01 lbs. Ration consumption was acceptable at 25 lbs/hd per day, and feed to gain conversion at 9.8:1 was "typical" for this age and breed type steer (see pasture paper for description); thus, the total costs/lb gain soared to $.7816.

Carcass traits were acceptable for the long-yearling steers with a backfat of .51 inches, ribeye area of 13.3 sq. in., and a USDA Yield Grade of 3.09. Age, weight, and breed type of these steers resulted in USDA Quality Grades of 42% Choice, 26% Select +, and 32% Select -. Fat thickness of the mature steers was only .22 inches and the USDA Yield Grade was good at 2.10. The USDA Quality Grades were quite variable with 45% Choice, 52% Select, and 3% Utility. Liver damage was low in both groups.

Application. Steers that enter the feedlot in excess of 900 pounds and in a moderate body condition have an excellent opportunity to meet acceptable carcass criteria after 90 to 100 days on feed. The economic feasibility of such a pasture-feedlot management system depends primarily on ownership status, breed type for feed conversion purposes, and margin. Continued ownership

of these heavyweight feeders may be the only sound, economic option for an equitable value from the pasture phase.

Table 1. Feedlot performance and carcass traits of long-yearlings and mature steers.

Item	Feedlot Performance: Long-Yearlings	Feedlot Performance: Mature
Number	50	41
Approx. age into lot, mos.	16-18	36-60
Date into lot	6-3-93	7-22-93
Date out of lot	9-14-93	11-17-93
Days on feed	103	118
Shipping wt, lbs	973	915
Off-truck wt, lbs	930	862
Transit shrink, %	4.4	5.9
Lot, final wt, lbs/hd	1320	1180
Feedlot ADG, lbs	3.28	2.30
Pay weight, lbs	1267	1133
Pay weight ADG, lbs	2.96	2.01
Feed:Gain (dry)		
Feedlot	6.13	8.56
Pay weight	6.79	9.81
Avg. daily consumption, lbs	25.56	25.00
Estm. consumption, % BW	2.27	2.45
TOTAL COSTS/lb Gain, $		
Feedlot	.4794	.6824
Pay weight	.5305	.7816
	Carcass Traits	
Hot carcass wt, lbs	808	702
Estm. dressing, %	63.8	62.0
Fat thickness, in	.52	.22
Ribeye area, in^2	13.3	12.9
KPH	2.4	2.5
USDA Yield Grade	3.09	2.10
Marbling score	3.87	3.99
Maturity	A	B
USDA Quality Grade		
% Choice	6	5
% Choice -	36	40
% Select +	26	32.5
% Select -	32	20
% Utility +	0	2.5
Liver damage		
Fluke, %	0	5
Condemned	2	7.5