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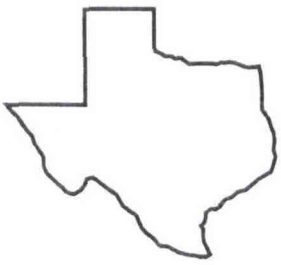

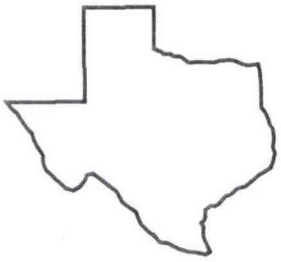

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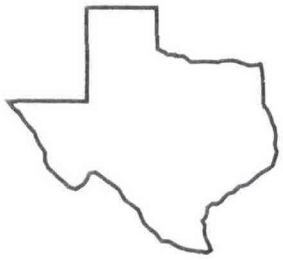

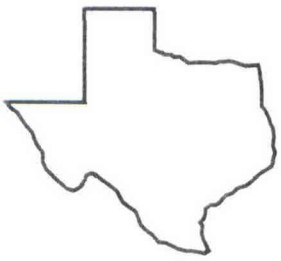

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PERFORMANCE AND CARCASS TRAITS OF BRAHMAN AND SIMMENTAL CROSSBRED STEERS FINISHED IN A SOUTH TEXAS FEEDLOT

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Background. Optimum cattle production and economic rewards are primarily products of the environment, management expertise, and market conditions. Spring-born steers weaned in the fall usually over-winter in a stocker-grazing scheme and enter the feedlot the following spring or summer. Fall-born steers may enter the feedlot directly at weaning in June-July, or graze warm-season grasses such as bermudagrass during the summer and then enter the feedlot in the autumn. Selection of feedlot sites to complement breed types is a critical factor with respect to performance and economic expectations. The objective of this experiment was to evaluate feedlot and carcass parameters of Brahman and 1/2 Simmental x 1/4 Brahman x 1/4 Hereford steers that had been weaned and grazed on various summer and/or winter pasture systems.

Research Findings. Brahman steers representing different calving seasons, and hence, different ages, were grazed on bermudagrass pastures at the Texas A&M University Agricultural Research and Extension Center at Overton and transported to a commercial South Texas feedlot for the fall-winter period. A comparative group of fall-born Simmental crossbred steers was also included in the feeding-carcass evaluation. The older, spring-born Brahman steers entered the feedlot approximately 300 lbs heavier than fall-born Brahman steers, and thus, were on feed for 111 days *vs* 188 days, respectively. Pay weight average daily gain (ADG) was about 2.5 lbs for both groups. Feed to gain conversion was 7.99 and 7.55, respectively, for spring-born and fall-born Brahmans, with resultant total costs/lb gain at $.6524 and $.6342 (Table 1). The Simmental crossbred, fall-born steers had feedlot ADG of 4.07 with a pay weight ADG of 3.74 which was similar to gains from previously fed calves from this research herd. Feed conversion was 6.03:1 and resultant costs/lb gain were $.4883 for the crossbred steers.

Carcass evaluations showed that all three groups of steers averaged about .35 inch backfat at time of slaughter. The USDA Yield Grades were also indicative of acceptable lean beef traits. All groups of steers met projected Quality Grade expectations of attaining the USDA Select grade or higher. The Simmental crossbred steers graded nearly 40% USDA Choice.

Application. Environmental conditions in South Texas during the winter months allowed for acceptable feedlot performance from both Brahman and 1/4 Brahman crossbred steers. Other than traditional transportation discounts between South Texas and the Texas High Plains, carcasses

were sold at the existing, daily market value. With respect to some regional discounts for Brahman and Brahman-influenced stocker-feeder steers, a viable economic incentive existed for these steers at time of slaughter. Certainly, there was an economic advantage associated with the continuous feedlot ownership of these previously bermudagrass-pastured steers, and especially the older, spring-born Brahman steers. Often, the price discounts for heavyweight cattle encourage stocker operators to maintain full or partial ownership until time of slaughter.

Table 1. Feedlot performance and carcass traits of Brahman and Simmental crossbred (SimX) steers following bermudagrass grazing.

	Feedlot Performance		
Item	Brahman	Brahman	SimX
Number	27	17	19
Calving season	Spring '91	Fall '91	Fall '91
Date into lot	10-21-92	10-21-92	10-21-92
Date out of lot	2-10-93	4-29-93	4-5-93
Days on feed	111	188	163
Lot, arrival wt, lbs/hd	874	583	668
Transit shrink, %	7.8	7.1	6.7
Lot, final wt, lbs/hd	1204	1076	1331
Feedlot ADG, lbs	2.97	2.62	4.07
Pay weight, lbs/hd	1156	1033	1278
Pay weight ADG, lbs	2.55	2.39	3.74
Feed:Gain (dry)	7.99	7.75	6.03
Avg. daily consumption, lbs	24.78	20.88	27.17
Estm. consumption, % BW	2.38	2.52	2.72
TOTAL COSTS/lb Gain, $	.6524	.6342	.4883
	Carcass Traits		
Approx. age at slaughter, mos.	23	19	18
Hot carcass wt, lbs	723	665	828
Estm. dressing, %	62.5	64.4	64.8
Fat thickness, in	.31	.35	.35
Ribeye area, in^2	12.1	11.2	14.1
KPH	1.42	1.42	1.36
USDA Yield Grade	2.5	2.5	2.32
USDA Quality Grade			
% Choice -	3.7	12.5	38.9
% Select +	48.2	50.0	38.9
% Select -	48.1	37.5	22.2