

Feedlot Performance and Carcass Data for Cattle Produced on Deseret Ranch

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INTRODUCTION

One of the big challenges facing U.S. cattlemen is the ability to meet the desires of the purchasers of their product. These purchasers include the stocker, feedlot and packing industries, as well as the consumer. In Florida, this problem is greatly aggravated by the prejudices (true or false) against Brahman-influenced cattle. As a result, many producers are penalized at weaning for the cattle "showing too much *Brahmer*." Florida cattlemen must begin to test their cattle to determine where their cattle stand in meeting the desires of the purchasers and then make whatever breeding, culling, and/or selection decisions are required.

BACKGROUND

In 1990-1991, Deseret participated in a study to collect stocker, feedlot and carcass performance of crossbred steers and the financial impact of each production phase on overall profitability. The steers were from various breeds, breeding programs, and locations across the United States (Utah, Florida, Wyoming, Nebraska) and Canada.

The Utah steers were produced from a two breed roto-terminal crossbreeding system using Beefmaster and Angus (Bm × A). The steers averaged 437 pounds (lb) at weaning.

The Canadian steers were produced from a three breed roto-terminal crossbreeding system using Hereford-Angus crosses (RWF) and Charolais (C). The steers averaged 505 lb at weaning.

The Florida steers were produced from a three breed rotational crossbreeding system using Braford (Bf), Red Brangus (RB), and Simbrah (S). The Braford bulls were

all Florida raised, while the Red Brangus bulls were from out of state. The steers averaged 488 lb at weaning.

The Wyoming steers were produced from a three breed roto-terminal crossbreeding systems using Black White Face crosses and Brangus (BWF). The steers averaged 581 lb at weaning.

The Nebraska steers were produced from Red Angus (RA) and a two breed rotational crossbreeding system using Charolais and Red Angus (C × RA). The steers averaged 537 lb at weaning.

All steers were weaned at approximately seven months of age and trucked to a ranch in Pawhuska, Oklahoma. The steers were placed in two equal size herds and rough wintered on stockpiled forage and cottonseed meal cubes. Approximately March 1, the two herds were merged into one with the steers grazing native tallgrass prairie (Big bluestem, Little bluestem, Indiangrass).

On July 7 the steers were trucked to a feedlot in Potwin, Kansas and placed in pens according to ranch origin and breed type. Slaughter point was to be when each pen averaged .40 inches of fat at the 12th rib as determined by ultrasound. All steers were slaughtered at the same IBP packing plant with carcass data determined by the USDA grader present on the day of grading.

SUMMARY

The Florida steers performed extremely well in both the winter and summer stocker periods, gaining .48 and 2.52 lb/hd/d, respectively. Their average daily gain (ADG) for the entire stocker phase was 1.21 lb, and they returned a profit of \$25.26/hd. The other breed types gained from -0.5 to .19 lb/d in the winter, 2.23 to 2.35

lb/d in the summer and .88 to 1.15 lb/d overall. Profit/Loss for these steers ranged from \$-9.10 to \$-54.86/hd.

During the feedlot phase, the Florida steers did not perform as well as in the stocker phase. The Red Brangus-sired (RB-X) steers gained 3.1 lb/d, had a cost per lb gained of \$.59 and lost \$119.00/hd. The Braford-sired (Bf-X) steers had an ADG of 2.7 lb, a cost per lb gained of \$.65 and lost \$119.00/hd. The other breed types had ranges of 3.7 to 3.9 lb ADG, \$.48 to \$.51 cost per lb gained and lost \$48.00 to \$68.00/hd.

For the combined stocker and feedlot phases, all ranches lost money on their steers. The range in loss was from \$34.00 to \$82.00/hd, and the Florida steers lost the least amount/hd.

In the carcass evaluation phase, the Florida steers performed quite well. Seventy-one percent of the RB-X and 33% of Bf-X steers were too heavy and were discounted \$.03/lb. Although the average for ribeye area for both the RB-X (13.2 sq in) and the Bf-X (12.2 sq in) were within the industry specification of 12.0-15.0 square inches, 40% of the Bf-X steers had ribeyes below 12.0. This would indicate a tendency for inadequate muscle in the Bf-X. The other breed types had similar problems with heavy carcasses, while only the A × Bm (Utah) steers were inadequate in muscle (11.6 sq in).

None of the breed types graded Choice at an adequate level in spite of steers having excessive amounts of fat (.53 -.64 inches). The percent Choice ranged from 33% to 41% as compared to the national average of 57.4%.

The bottom line is that, across all breed types and levels of performance, there was no difference in average price per hundred weight of carcasses received from the packer. The Brahman influenced cattle of Florida were able to perform as well as cattle of other breed types from different regions of the U.S.

TABLE 1. Performance of Steers in the Winter and Summer Stocker Program, 1990-91.

Origin of Steers					
	Utah	Canada	Florida	Wyoming	Nebraska
Starting Stocker Data (Fall)					
Number of steers in	50	97	100	49	50
Average in wt, lb	478	505	488	581	537
Price/cwt, \$	102.34	99.60	95.00	90.63	100.30
Freight/cwt, \$	6.47	6.99	5.23	5.43	4.58
*Delivered price, #	108.81	106.59	100.23	96.06	104.88
Winter Performance Data (Fall-March)					
Final average wt, lb	487	529	575	573.	536
ADG, lb	.05	.19	.48	-.05	0
Death loss, %	0.0	0.0	2.0	0.0	0.0
Summer Performance Data (April-July)					
ADG, lb	2.23	2.34	2.52	2.35	2.35
Total Stocker Phase					
Final ave. wt., lb	714	768	832	813	776
Total gain, lb	236	263	344	232	239
ADG, lb	.89	1.15	1.21	.88	.90
Cost of gain/lb, \$.71	.64	.62	.73	.75
Death loss, %	0.0	1.0	2.0	0.0	2.0
Out price/cwt, \$	91.00	89.00	88.00	88.50	89.00
P/L per hg, \$	-37.20	-24.63	25.26	-9.10	-54.86
Total P/L,\$	-1860	-2364	2475	-446	-2688

*Price reflects local price differences and hauling to Pawhuska, Oklahoma.

TABLE 2. Feedlot Performance and Carcass Characteristics of Steers, 1990-91.

	Origin of Steers								
	Utah	Canada			Florida			Wyoming	Nebraska
	A × Bm	RWF		C-X	RB-X		Bf-X	BWF	RA C × RA
Feedlot Phase									
Avg. final wt., lb.	1163	1210		1241	1218		1131	1271	1237
Total gain, lb.	449	444		467	367		317	458	461
ADG, lb.	3.9	3.7		3.9	3.1		2.7	3.8	3.9
Feed efficiency, lb. feed/lb. gain	7.47		7.49		8.61		9.44	7.36	7.03
Cost/lb gaines, \$.51		.51		.59		.65	.50	.48
*Adj. P/L per hd, \$	-65		-59		-119		-119	-68	-48
*Adj. total P/L	-3288		-5644		-5821		-5821	-3241	-2338
Overall P/L									
*Adj. P/L per hd, \$	-78		-38			-34		-63	-82
*Adj. total P/L, \$	-3838		3688			-3372		-3021	-399
Carcass Evaluation									
Carcass wt., lb.	721	750		771	757		718	788	769
% CW 550-735	47	33		33	29		67	15	18
% CW 735-950	53	67		67	71		33	85	82
Dress %	60.7	62.0		62.1	62.1		63.5	62.0	62.2
REA, in ²	11.6	13.2		13.6	13.2		12.2	12.8	13.5
REA/CW, in ²	1.59	1.77		1.77	1.75		1.70	1.60	1.76
% REA < 12 in.	47	21		9	9		40	23	12
% REA/CWT < 1.7	77	43		35	28		44	75	29
Fat at 12 th rib	.48	.53		.40	.64		.45	.50	.57
Yield Grade	3.10	2.90		2.52	3.19		2.80	3.10	2.90
% Y.G. 1 & 2	45	57		67	33		63	36	.57
% Y.G. > 4	6	2		0	11		2	5	2
% Choice	33	40		41	35		39	40	41
*Adj. avg. price/CWT of carcass, \$	113.15		113.26		112.61		113.15	122.68	113.00

*Because of daily market movements, income was adjusted to equal prices for same quality carcasses.