

EFFECT OF CASTRATION, DEHORNING AND BODY TEMPERATURE AT PROCESSING ON WEIGHT GAIN OF NEWLY RECEIVED STOCKER CATTLE

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Story in Brief

One-hundred-eighty-five stocker cattle were purchased locally and processed as part of a field trial evaluating the effect of mass medication on performance. Data were kept as to whether the cattle were horned or intact bull calves at processing and their rectal temperature. Dehorning cattle with horns resulted in no difference in weight gain between them and naturally polled or previously dehorned cattle. Bulls castrated at receiving gained .15 lb/animal/day less than cattle purchased as steers. Body temperatures above 103.5°F had no effect on subsequent weight gain.

(Key Words: Stockers, Castration, Dehorn.)

Introduction

Cattle purchased through auction or off-ranch sales may be horned or intact bulls of varying weight. Stocker operators buying these cattle often are unsure as to the discount to place on these cattle due to potential reductions in performance resulting from dehorning or castration. Schroeder et al. (1988) reported discounts of \$.51/cwt for horned cattle and reductions in prices paid for bulls relative to steers of 2 to 10% dependent on weight and season. In field trials, Brazle (1988) reported reductions in gain due to castration of .35 lb/d for 96 d and increased morbidity from 15% for steers to 36% for castrated animals. Dehorning depressed gains up to .12lb/animal/day.

Materials and Methods

Cattle were locally purchased and processed as part of a field trial evaluating mass-medication of locally purchased cattle (Montague, 1996). Cattle were randomly assigned to treatments of mass medication with Micotil[®] or oxytetracycline and sulfa boluses. Cattle were purchased in small lots throughout the week and processed, including vaccinations, the morning following arrival. Assignment to mass medication treatments was performed

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one day a week on all cattle received during that week. Data regarding body temperatures, horns and castration were taken at this time.

Results and Discussion

Castrated cattle tended to gain .15 lb/animal/day ($P < .10$) less than cattle purchased as steers (Table 1). Dehorned cattle tended to gain slightly less than polled or previously dehorned cattle ($P < .20$). No difference was found in subsequent weight gain of cattle exhibiting body temperatures above or below 103.5°F at time of mass medication (Table 2).

Cattle in this trial were purchased from local salebarns. Reduced stress relative to that experienced by cattle assembled over a number of days and shipped greater distances may warrant reduced discounts for horned cattle or intact bull calves.

Literature Cited

- Brazle, F.K. et al. 1988. Report of Progress. KSAgr. Exp. Sta. 547.
Montague, M.R. et al. 1996. OklaAgr. Exp. Sta. Res. Report. P-951.
Schroeder, T. et al. 1988. Western J.Agr. Econ. 13: 71-81.

Table 1. Effect of castration and dehorning on weight gain of receiving cattle.^a

Treatment	No.	ADG,lb	Avg days in trial after reception	P value
Steers	92	1.19	60	
Castrated bulls	93	1.04	84	.10
Polled cattle	135	1.17	85	
Dehorned at receiving	50	1.05	78	.20

^a Least square means.

Table 2. Effect of body temperature at processing on subsequent weight gain.

Temperature	ADG,lb	P value
Below 103.5°F	1.13	
Above 103.5°F	1.10	.80